

EXHIBIT 15

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**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION**

THE STATE OF TEXAS, ET AL.,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

CIVIL NO. 4:20-CV-957-SDJ

EXPERT REPORT OF DOUGLAS SKINNER

July 30, 2024

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I. Qualifications

1. I am the Sidney Davidson Distinguished Service Professor of Accounting at the University of Chicago, Booth School of Business. I have been a tenured full professor at the University of Chicago since 2005, and previously served as Deputy Dean for Faculty and Interim Dean. Prior to my appointment at the University of Chicago, I was the KPMG Professor of Accounting at the Ross School of Business, University of Michigan, where I held tenured and tenure-track appointments from 1989 until 2005 and served as chair of the accounting department.

2. I hold a B. Econ. (First Class Honors in Accounting and Finance) from Macquarie University in Sydney, Australia and an M.S. and Ph.D. (Applied Economics: Accounting and Finance) from the University of Rochester. I have taught undergraduate upper-class students, full-time and part-time MBA students, Executive MBA (“EMBA”) students, executives, consultants, and Ph.D. students. I have taught introductory financial accounting, intermediate financial accounting, accounting for financial instruments, corporate financial reporting and analysis, financial statement analysis, managerial (cost) accounting, corporate finance, investments, valuation, and empirical methods in accounting research. Most recently, I have taught Corporate Finance and Valuation, as well as Managerial Accounting, in the University of Chicago’s EMBA program at campuses in Chicago, London, and Hong Kong and a Ph.D. class in empirical capital markets research.

3. From 2006 to 2021 I was Senior Editor of the *Journal of Accounting Research*, one of the preeminent academic accounting journals in the world. Before moving to Chicago, I was Co-Editor of the *Journal of Accounting and Economics*, also one of the world’s leading academic accounting journals. I also served as editor of the *Review of Accounting Studies*, and for several terms on the editorial board of *The Accounting Review*. I am a member of the American Accounting Association and the American Finance Association. I frequently present my research at major accounting and finance conferences and prominent universities. I have supervised doctoral students who have accepted faculty positions at major business schools around the world including Stanford, Harvard, Wharton, MIT, Columbia, Cornell, Michigan, Yale, and Chicago.

4. I have published research on a variety of topics in accounting, auditing, capital markets, investments, and corporate finance, including how security prices respond to corporate

disclosures (including event studies of earnings disclosures); corporate managers' incentives to disclose forward-looking information, including guidance; the payout practices of public companies (i.e., firms' dividend and repurchase decisions); corporate managers' financial reporting, disclosure, and capital management decisions; how accounting information is used in contracts between the various corporate stakeholders; and the nature of corporate debt agreements.

5. My research is published in leading accounting and finance journals, including *The Accounting Review*, the *Journal of Accounting and Economics*, the *Journal of Accounting Research*, the *Journal of Business*, *The Journal of Finance*, and the *Journal of Financial Economics*. My research has been featured in articles in *The Wall Street Journal*, *The New York Times*, *The Financial Times*, *The Economist*, and *Bloomberg Businessweek*.

6. I serve as an Independent Trustee and chair of the Audit Committee for Harbor Funds, Harbor Funds II, and Harbor ETF Trust.

7. A copy of my curriculum vitae, including my publications, is attached as **Appendix A**. A list of my previous expert work, including reports, depositions, and trial testimony, over the past ten years is attached as **Appendix B**.

II. Scope of Assignment

8. I have been retained by counsel for Google LLC ("Google") to review and respond to certain conclusions in the expert report submitted by Jeffrey S. Andrien, dated June 7, 2024, on behalf of plaintiffs the State of Texas, et al. ("Plaintiffs"),¹ and to provide opinions regarding the profitability of Google's ad tech business, i.e., Display & Video, Apps and Analytics ("Google DVAA" or "DVAA").²

9. Specifically, I have been asked to review and respond to those portions of the Andrien Report that include his calculations, findings, and opinions related to the financial performance and financial position of Alphabet, Google's advertising business, and Google DVAA. Further, I have been asked to be prepared to provide rebuttal testimony and opinions relating

¹ Expert Report of Jeffrey S. Andrien, June 7, 2024, and Backup Materials ("Andrien Report").

² See, e.g., GOOG-AT-MDL-004326981 at -6989. I understand that in internal documents Google DVAA is sometimes referred to as "Display and Video" or just "Display." See, e.g., GOOG-AT-MDL-009017821 at -7822. I further understand that Google has been moving away from the DVAA nomenclature. See, e.g., Deposition of Jessica Mok, November 10, 2023 ("Mok Deposition"), p. 63:4-14 ("AVID is the team name that -- the name of the team in August 2022, which is the time frame of this file. ... Q Is it the team name now? A Yes. ... Q Do you know what the team name was before? A DVAA."). I use the terms DVAA and Google DVAA interchangeably to refer to the collection of Google's ad tech products historically grouped under "Display & Video, Apps and Analytics." I also refer to this collection of products as Google's "ad tech business."

to Plaintiffs' witnesses to the extent that they address the financial performance, profitability, and financial position of Alphabet and Google, including Google's ad tech business, and related issues. I understand that Professor Steven Wiggins is evaluating Mr. Andrien's opinions regarding the appropriate civil penalty the trier of fact should impose on Google in the event it finds Google liable for the deceptive trade practices alleged by Plaintiffs; I do not express an opinion on that aspect of the Andrien Report. In addition, I have been asked by counsel to summarize measures of the cost of revenue and gross profit for Alphabet (and Google) and DVAA for fiscal years 2013 to 2023, to the extent such information is available.

10. In formulating my opinions, I have relied on my knowledge, prior experience, academic research on relevant topics, experience as a journal editor reviewing academic research articles, and formal training in economics, finance, and accounting. A list of the materials I relied upon in preparing this report is attached as **Appendix C**.

11. I am being compensated at my standard billing rate of \$1,125 per hour in this case. I have been assisted in this matter by staff of Cornerstone Research, who worked under my direction. I receive compensation from Cornerstone Research based on its collected staff billings for its support of me in this matter. Neither my compensation in this matter nor my compensation from Cornerstone Research is in any way contingent or based on the content of my opinion or the outcome of this or any other matter. My work on this case is ongoing; I reserve the right to modify or supplement my opinions in the event I become aware of additional information.

III. Summary of Opinions

12. Based on my background and experience, my review of the Andrien Report, and documents and testimony I have reviewed in this matter to date, I have formed the following opinions:

13. The measures and calculations that Mr. Andrien puts forth for DVAA for the 2013–2023 period are flawed and unreliable in a number of respects, and tend to overstate the revenue and operating profitability of the set of at-issue products and thus, to the extent these measures are relevant in assessing the benefits Google received from its allegedly deceptive conduct, will tend to overstate those benefits:

- a. Mr. Andrien fails to acknowledge that the internal DVAA P&Ls he relies on as the basis for his measures of financial performance include revenue and

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operating profit for certain DVAA products that I understand are not at issue in this matter. As a result, the measures of financial performance, including revenue and operating profit, that he puts forth tend to overstate revenue and operating profit for the set of DVAA products I understand as being relevant in this matter.

- b. Mr. Andrien fails to acknowledge that allocations of certain indirect costs are, in many cases, not reflected (or not fully reflected) in various internal DVAA P&Ls, including those he relies on, which results in measures of operating profitability for DVAA that are overstated relative to those that would be obtained in P&Ls that reflect all relevant costs of the business.
- c. Mr. Andrien fails to use actual 2022 revenue and operating profit and instead uses an internal DVAA P&L for fiscal year 2022 that comprises nine months of actual results and three months of forecast results. Mr. Andrien uses these same 2022 internal DVAA P&L numbers for fiscal year 2023, rather than using actual revenue and operating profit for that year. It is not clear why Mr. Andrien relies on forecast numbers or numbers from prior fiscal years when actuals are available, nor does he acknowledge that this choice results in overstated measures of DVAA operating profit for fiscal years 2022 and 2023.

14. Mr. Andrien makes a number of assertions regarding the financial performance of Alphabet and Google’s advertising business to support his conclusions about the appropriate civil penalty the trier of fact should impose in the event it finds Google liable for the deceptive trade practices alleged by Plaintiffs. Specifically, Mr. Andrien indicates that his analysis of Alphabet and Google’s financial performance is relevant to informing “the amount necessary to deter Google’s misconduct and its ability to pay” a civil penalty.³ Mr. Andrien’s analyses of Alphabet and Google’s financial performance are flawed in the following respects:

- a. Mr. Andrien puts forth a set of financial metrics and measures that are not limited to Google’s DVAA business but instead relate to the financial performance of Alphabet and Google as a whole. As a result, Mr. Andrien’s purported analysis of the financial performance of Alphabet and Google does not relate to the products within DVAA that are at issue in this matter.

³ Andrien Report, ¶ 77.

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- b. Mr. Andrien fails to provide any definition or basis for his opinion that Alphabet’s financial performance has been “extraordinary” or why this opinion, even if supported, has any connection to the financial performance of Google’s DVAA business.⁴ At least in part, the basis for this opinion appears to rest on a purported comparison to the average financial performance of the set of public companies in the S&P500 and Nasdaq Composite indices; Mr. Andrien fails to explain why these companies, which span a variety of sectors, are a relevant or otherwise useful benchmark for Alphabet.

15. Mr. Andrien concludes his report by claiming that if a hypothetical \$29 billion penalty were imposed on Google it “would not be so burdensome as to impact the day-to-day operations of the company.”⁵ Mr. Andrien’s analysis is flawed for the following reasons:

- a. Mr. Andrien’s analysis does not appear to be based on any well-defined, supported methodology, nor does he define or explain “day-to-day operations” which in my experience is not a defined term in accounting, financial analysis, or financial economics. As a result, the basis for his conclusion that a \$29 billion penalty “would not... impact the day-to-day operations” of Google cannot be tested because it is not defined in any economically meaningful way.
- b. Mr. Andrien’s analysis fails to consider the magnitude of his proposed penalty relative to the past profitability of Google’s DVAA business and specifically that portion of the DVAA business that relates to the set of at-issue products.
- c. Mr. Andrien’s analysis appears to ignore certain adverse consequences the proposed penalty could have on Alphabet’s shareholders, business, competitive position, and ability to innovate.

IV. Background on Alphabet Inc. and Google’s Ad Tech Business

16. Google was founded as an online search business in 1998.⁶ The company went public in 2004 and operated as a single segment entity until 2015, when Alphabet Inc. (“Alphabet” or

⁴ Andrien Report, ¶ 11.

⁵ Andrien Report, ¶ 131.

⁶ Google, “From the Garage to the Googleplex,” available at <https://about.google/our-story/>, accessed on July 23, 2024; Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2023 (“Alphabet 2023 10-K”), p. 4 (“Our mission to organize the world’s information and make it universally accessible and useful is as relevant today as it was when we were founded in 1998. Since then, we have evolved from a company that helps people find answers to a company that also helps people get things done.”).

the “Company”), a public holding company, was formed.⁷ Alphabet is a collection of businesses, the largest of which is Google.⁸ From 2015 to 2019, Alphabet reported two segments for purposes of external financial reporting, Google and Other Bets.⁹ DVAA was part of Google, which included “products such as ads, Android, Chrome, hardware, Google Cloud, Google Maps, Google Play, Search, and YouTube.”¹⁰ Other Bets is “a combination of multiple operating segments that are not individually material.”¹¹

17. In 2020, Google was divided into two reportable segments: Google Services and Google Cloud.¹² Google’s advertising businesses are part of Google Services, which includes “ads, Android, Chrome, devices, Google Maps, Google Play, Search, and YouTube.”¹³ Google Cloud comprises Google’s “infrastructure and platform services, collaboration tools, and other services for enterprise customers.”¹⁴

⁷ See, e.g., Google Inc. Form 424B4, August 18, 2004; Google Inc. Form 10-K for the fiscal year ended December 31, 2014, p. 79 (“[W]e operate as a single operating segment.”). In August 2015, Google announced plans to create a new public holding company called Alphabet, and together Google and Alphabet Inc. filed a 10-K for 2015. See Alphabet Inc. and Google Inc. Form 10-K for the fiscal year ended December 31, 2015 (“Alphabet and Google 2015 10-K”), p. 2 (“[W]e announced plans in August 2015 to create a new public holding company, called Alphabet.”).

⁸ Alphabet and Google 2015 10-K, p. 2; Alphabet 2023 10-K, p. 4.

⁹ See, e.g., Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2016 (“Alphabet 2016 10-K”), p. 3 (“Alphabet is a collection of businesses -- the largest of which, of course, is Google. It also includes businesses that are generally pretty far afield of our main Internet products such as Access, Calico, CapitalG, GV, Nest, Verily, Waymo, and X. We report all non-Google businesses collectively as Other Bets.”), p. 23; Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2019 (“Alphabet 2019 10-K”), pp. 5, 29. See also Alphabet and Google 2015 10-K, p. 24; Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2017 (“Alphabet 2017 10-K”), p. 27; Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2018 (“Alphabet 2018 10-K”), p. 26.

¹⁰ Alphabet 2019 10-K, p. 29; see also Alphabet 2018 10-K, p. 26. In 2016 and 2017, this segment also included Commerce and new efforts like virtual reality. See Alphabet 2016 10-K, p. 23; Alphabet 2017 10-K, p. 27. In 2015, this segment also included Commerce, Apps, and newer efforts like virtual reality. See Alphabet and Google 2015 10-K, p. 24.

¹¹ Alphabet 2019 10-K, p. 29; see also Alphabet 2018 10-K, p. 26; Alphabet 2017 10-K, p. 27; Alphabet 2016 10-K, p. 23; Alphabet and Google 2015 10-K, p. 24.

¹² Alphabet 2023 10-K, p. 4 (“We report Google in two segments, Google Services and Google Cloud, and all non-Google businesses collectively as Other Bets.”); Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2020 (“Alphabet 2020 10-K”), p. 33 (“Beginning in the fourth quarter of 2020, we report our segment results as Google Services, Google Cloud, and Other Bets”). See also Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2022 (“Alphabet 2022 10-K”), p. 82; Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2021 (“Alphabet 2021 10-K”), p. 84.

¹³ Alphabet 2023 10-K, p. 86. See also Alphabet 2022 10-K, p. 82; Alphabet 2021 10-K, p. 84; Alphabet 2020 10-K, p. 33.

¹⁴ Alphabet 2023 10-K, p. 86. See also Alphabet 2022 10-K, p. 82; Alphabet 2021 10-K, p. 84; Alphabet 2020 10-K, p. 33.

18. In addition to disclosing information about its reportable segments, Alphabet reports certain more granular information for its advertising business. I understand that Google’s advertising technology (“ad tech”) products are included as part of “Google Network.”¹⁵

19. **Table 1** presents revenue and operating income for the Company’s 2013–2023 fiscal years for Google Network, Google Services and Alphabet as a whole, as reported in the relevant Alphabet (and Google) Form 10-K filings (operating income is not reported for Google Network).¹⁶ For fiscal year 2023, Google Network revenue represented approximately 10% of Alphabet’s total revenue and declined from fiscal year 2022.¹⁷ Over the 2018–2023 period, Google Network revenue grew by a compound annual growth rate (“CAGR”) of approximately 9%, lower than that of Google Services and Alphabet, each of which grew in excess of 15%.¹⁸

¹⁵ See, e.g., Alphabet 2023 10-K, p. 31 (“Google Network, which includes revenues generated on Google Network properties participating in AdMob, AdSense, and Google Ad Manager.”). Google Network includes revenue from certain products not generally considered part of Google DVAA, such as AdSense for Search. See, e.g., GOOG-AT-MDL-015133962 at -3963; GOOG-AT-MDL-015133684 at -3685. See also Defendant Google LLC’s Responses and Objections to Plaintiffs’ Second Set of Interrogatories, *The State of Texas, et al. v. Google LLC*, April 8, 2024 (“Google’s Responses to Plaintiffs’ Second Set of Interrogatories”), p. 4 (stating that “AdSense for Content” is included in the definition but not “AdSense for Search.”).

¹⁶ Alphabet reported segment results for Google and Other Bets in its 2015–2019 Form 10-K filings and for Google Services, Google Cloud, and Other Bets in its 2020–2023 Form 10-K filings.

¹⁷ Alphabet 2023 10-K, p. 35.

¹⁸ Over the five-year (2018-2023) CAGRs for Google Network, Google Services, and overall Alphabet revenues were 9.4%, 15.9%, and 17.6%, respectively.

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Table 1
Alphabet/Google Revenue and Operating Income, 2013–2023^[1]

<i>in millions</i>	2013	2014	2015	2016	2017
Revenue					
Google Network	\$13,650	\$14,539	\$15,033	\$15,598	\$17,616
Google Segment ^[2]	\$55,507	\$65,674	\$74,544	\$89,984	\$110,547
Alphabet	\$55,519	\$66,001	\$74,989	\$90,272	\$110,855
Operating Income					
Google Segment ^[2]	\$16,260	\$18,965	\$23,319	\$27,055	\$32,456
Alphabet	\$15,403	\$16,496	\$19,360	\$23,716	\$26,178

<i>in millions</i>	2018	2019	2020	2021	2022	2023
Revenue						
Google Network	\$20,010	\$21,547	\$23,090	\$31,701	\$32,780	\$31,312
Google Services ^[2]	\$130,524	\$151,825	\$168,635	\$237,529	\$253,528	\$272,543
Alphabet	\$136,819	\$161,857	\$182,527	\$257,637	\$282,836	\$307,394
Operating Income						
Google Services ^[2]	\$43,137	\$48,999	\$54,606	\$88,132	\$82,699	\$95,858
Alphabet	\$27,524	\$34,231	\$41,224	\$78,714	\$74,842	\$84,293

Source: Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note:

[1] This table contains data for each fiscal year drawn from the most recent Form 10-K filing that reported segment-level data (e.g., data for 2021 drawn from 2023 10-K). Revenue and operating income as reported in Alphabet Form 10-K filings. Alphabet does not report operating income for Google Network.

[2] Table reports data for the Google segment for 2013–2017 and for the Google Services segment for 2018–2023. Alphabet reported the relevant numbers for the Google and Other Bets segments in its 2015–2019 Form 10-K filings and for the Google Services, Google Cloud, and Other Bets segments in its 2020–2023 Form 10-K filings.

20. I understand that Google’s ad tech business encompasses products and services that facilitate advertising transactions between advertisers (including advertising agencies) and publishers of digital content.¹⁹ Advertisers (or advertising agencies) that purchase or bid on advertising space do so directly and/or through ad buying tools, including but not limited to

¹⁹ Publishers of online content create content for, or own, digital property. This includes a variety of individuals and entities, from those who write blogs to shopping sites to online news sources to game creators. See, e.g., GOOG-AT-MDL-008930806 at -0808 (“The publisher is a supplier who owns websites or mobile applications (‘app’) with ad inventory for sale.”). Websites and apps can be programmed to create slots where ads are displayed. See, e.g., Mykola Kryvtun, “In-App Playbook: How to Get the Most Out of Advertising in Apps?” *Admixer*, May 24, 2021, available at <https://blog.admixer.com/admixer-guide-app-advertising/>, accessed on July 23, 2024 (“App developers set up ad slots across their interface and get revenue from impressions.”); Google, “How AdSense Works,” available at <https://support.google.com/adsense/answer/6242051>, accessed on July 23, 2024 (“You make your ad spaces available by pasting ad code on your site, and choose where you want the ads to appear. Advertisers bid to show in your ad spaces in a real-time auction. The highest paying ads show on your site.”).

demand side platforms (“DSPs”).²⁰ Publishers may use software tools, including ad exchanges/supply side platforms (“SSPs”) and publisher ad servers to sell advertising space (“ad inventory”) on their websites or apps.²¹

21. Based on internal documents and as I further describe below, I understand that Google prepares internal profit and loss statements (P&Ls) in various forms for internal decision-making purposes. As of fiscal year 2024, Google prepares internal P&Ls for DVAA as well as for six DVAA products: Google Ad Manager, AdSense, AdMob, Google Ads, Display and Video 360 (“DV360”), and Campaign Manager 360 (“CM360”).²²

22. I understand that Plaintiffs’ remaining claims in this matter focus on certain DVAA products; specifically, Google Ad Manager (including certain functions that had been performed by AdX and DFP), Google Ads, and DV360.²³ I further understand that certain of the revenues and profits attributable to these products relate to transactions involving in-app ads, which I understand Plaintiffs do not consider to occur in the relevant markets.²⁴

²⁰ Thad Baker, “What is Google Display & Video 360?” *Merkle Cardinal Path*, April 28, 2021, available at <https://www.cardinalpath.com/blog/what-is-google-display-video-360>, accessed on July 23, 2024 (“DV360 is Google’s own demand side platform. A DSP is a technology platform used to buy and run programmatic advertising.”); GOOG-AT-MDL-001950473 at -0480 (“Ultimate customer is the marketer/ advertiser, whose job is to reach their target audience in the most efficient way possible, given their constraints (budget, targeting, etc).”); Sissie Hsaio, “How Our Display Buying Platforms Share Revenue with Publishers,” *Google*, June 23, 2020, available at <https://blog.google/products/admanager/display-buying-share-revenue-publishers/>, accessed on July 23, 2024 (“Google also works with large brands and their agencies to help them execute complex display advertising strategies and campaigns. These advertisers often use our Display & Video 360 enterprise software to reach consumers around the world.”).

²¹ IAB Australia, “Executive Briefing: Advertising Technology Purchase Guidelines,” March 2018, available at https://iabaustralia.com.au/wp-content/uploads/2018/02/Ad-Tech-Purchase-Guidelines_March-2018.pdf, accessed on July 23, 2024, p. 3 (“Sell-Side Platform (SSP) ... Software used by publishers to aggregate, consolidate, and manage available demand sources and exchange inventory. Sometimes includes ad serving functionality.”), p. 18 (“Ad Servers are technology that serve, track, report and optimise online ads for brands and digital publishers.”); Google, “What is Inventory?” available at <https://support.google.com/admanager/answer/10064557?hl=en>, accessed on July 23, 2024.

²² See, e.g., GOOG-AT-MDL-C-000018256. I understand that the latest produced internal financials only include information for AdSense for Content and not for other AdSense products. See, e.g., GOOG-AT-MDL-019564626 at -4627–4629 (“Google will provide the following information, on a worldwide basis, for the years 2021 and 2022, separately for Google Ad Manager, AdSense for Content, Google Ads (limited to display advertising), and DV360. ... In addition to the years 2021 and 2022, Google has provided financial data (booked revenue, net revenue, gross margin, and operating profit) by product (including Google Ad Manager, AdSense for Content, DV360, and Google Ads (limited to Display Network)) for the year 2020”); GOOG-AT-MDL-019564516 at -4523 (“Display P&L - 2023 V8 contains information responsive to Interrogatory 14 for the entire 2020-2022 time period on an annual basis, including support for the information included in Exhibit B of Google’s Amended Supplemental Response to Interrogatory 3.”).

²³ Fourth Amended Complaint, *In Re: Google Digital Advertising Antitrust Litigation*, May 5, 2023 (“Complaint”), ¶ 17; Opinion and Order re Motion to Dismiss, *In Re: Google Digital Advertising Antitrust Litigation*, September 13, 2022, pp. 30–34.

²⁴ Complaint, Section VI.

V. Background on Financial Reports and Accounting Data

23. Accounting systems record, measure, and summarize the economic effects of transactions and events on an entity during a given period, typically through financial reports that take various forms. These reports are used both internally and to prepare financial statements as part of the formal external reporting process.

24. The financial statements that companies report externally are intended to provide consistent, reliable, and relevant information to external constituents such as equity market investors (including current shareholders) and creditors.²⁵

25. U.S. GAAP consists of a body of generally accepted accounting principles and procedures (“standards”) developed and promulgated by an independent, private-sector standard setter as well as related rules and interpretative releases of the SEC.²⁶ All public companies file annual and quarterly reports with the SEC (i.e., Forms 10-K and 10-Q). These reports must include financial statements prepared in accordance with U.S. GAAP.²⁷ The SEC requires that the financial statements in annual reports of public companies are audited by independent, external auditors.²⁸

²⁵ Srikant M. Datar and Madhav V. Rajan, *Hornsgren’s Cost Accounting: A Managerial Emphasis*, Sixteenth Edition (Hoboken, NJ: Pearson, 2018) (“Hornsgren’s Cost Accounting”), p. 3.

²⁶ The Financial Accounting Standards Board (“FASB”) is the independent, private-sector, not-for-profit organization that establishes financial accounting and reporting standards for public companies that are referred to as Generally Accepted Accounting Principles, “U.S. GAAP” or simply “GAAP.” The FASB is recognized by the SEC as the designated accounting standard setter for public companies. *See, e.g.*, Financial Accounting Standards Board, “About the FASB,” available at <https://www.fasb.org/facts>, accessed on July 23, 2024. The FASB Accounting Standards Codification (“ASC”) is the source of authoritative GAAP recognized by the FASB for public companies. *See* Financial Accounting Standards Board, “105-10-05: Overview and Background,” available at <https://asc.fasb.org/1943274/2147479442>, accessed on July 23, 2024 (“This Topic establishes the *Financial Accounting Standards Board (FASB) Accounting Standards Codification*® (Codification) as the source of authoritative generally accepted accounting principles (GAAP) recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the Securities and Exchange Commission (SEC) under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. In addition to the SEC’s rules and interpretive releases, the SEC staff issues Staff Accounting Bulletins that represent practices followed by the staff in administering SEC disclosure requirements, and it utilizes SEC Staff Announcements and Observer comments made at Emerging Issues Task Force meetings to publicly announce its views on certain accounting issues for SEC registrants.”).

²⁷ United States Securities and Exchange Commission, “Exchange Act Reporting and Registration,” June 24, 2024, available at <https://www.sec.gov/resources-small-businesses/going-public/exchange-act-reporting-registration>, accessed on July 24, 2024; United States Securities and Exchange Commission, “Financial Reporting Manual: Topic 1 – Registrant’s Financial Statements,” November 18, 2020, available at <https://www.sec.gov/corpfin/cf-manual/topic-1>, accessed on July 24, 2024.

²⁸ United States Securities and Exchange Commission, “All About Auditors: What Investors Need to Know,” June 24, 2002, available at <https://www.sec.gov/about/reports-publications/investorpubsaboutauditorshtm>, accessed on July 24, 2024; United States Securities and Exchange Commission, “Financial Reporting Manual: Topic 1 – Registrant’s Financial Statements,” November 18, 2020, available at <https://www.sec.gov/corpfin/cf-manual/topic-1>, accessed on July 24, 2024.

26. Internal financial reports serve a variety of management and business purposes, often at different levels of the organization.²⁹ Managers adapt internal reports to provide financial or non-financial information most relevant to the purposes of the company or its managers (including those at different levels of the organization). These internal reports do not have to conform to U.S. GAAP.³⁰

27. Aggregating, organizing, and analyzing cost information requires an understanding of the nature of the economic resources consumed by the organization. To analyze, manage, and/or report information relevant for decisions, management may assign or allocate costs to “cost objects” such as businesses, products and services, or activities, depending on purpose.³¹

28. Costs can be classified as either direct or indirect costs. Direct costs are those that can be directly traced to a cost object, such as a specific division, activity, process, product, or service.³² In a manufacturing organization, direct costs typically include the costs of materials that go into a product and the cost of labor used to assemble the product. Indirect costs are those that cannot be directly traced to a business or product. The salaries of centralized, administrative personnel (e.g., payroll department employees) are usually indirect costs. If relevant and useful for some decision, indirect costs may be allocated to the relevant cost object using an allocation rule or mechanism.³³ The allocation of indirect costs is often complex and challenging, especially for entities that have multiple, inter-connected and related products and businesses.³⁴ Companies may allocate indirect costs to individual cost objects in different ways, depending on what drives the costs and the purpose of the analysis, or they may choose not to allocate indirect costs at all.

29. An important consideration in preparing internal accounting and financial reports is the identification of which information (including cost information) is relevant and useful for the purpose at hand; different purposes call for different information.³⁵ Cost-benefit considerations are also relevant in determining how internal reports are prepared. For example, organizations may choose not to allocate certain indirect costs to different products or business units if the costs of such allocations exceed the benefits.³⁶ Similarly, it is not uncommon for entities *not* to allocate certain indirect costs to products or businesses,

²⁹ Horngren’s Cost Accounting, pp. 2–3.

³⁰ Horngren’s Cost Accounting, pp. 2–3.

³¹ Horngren’s Cost Accounting, p. 29.

³² Horngren’s Cost Accounting, p. 29.

³³ Horngren’s Cost Accounting, pp. 29–30.

³⁴ Horngren’s Cost Accounting, pp. 30–31.

³⁵ Horngren’s Cost Accounting, p. 13.

³⁶ Horngren’s Cost Accounting, pp. 2–3, 655.

depending on the nature of the costs and purpose of the analysis.³⁷ It is also not uncommon for entities to prepare different P&Ls or different versions of P&Ls (with different revenue or cost data) for a given product or division for different internal purposes. For similar reasons, how internal P&Ls are prepared may change over time as businesses (and how those businesses are managed and organized) change and evolve.

VI. Internal Management Reporting at Google

30. Alphabet (and Google) prepare a variety of internal accounting and financial reports at different levels of the organization for a variety of business and management purposes. Alphabet's accounting policies indicate that internal P&Ls provide "results and metrics that management uses to make business decisions, allocate resources, and gain insight into the overall health of the business."³⁸

31. Google prepares internal P&Ls for various product areas within Google Services. As I explain further below, Google prepares internal P&Ls for internal purposes, including for business and management decisions.³⁹ The preparation, format, and use of these internal P&Ls has naturally evolved and expanded over time to reflect how Google's business has changed—as products emerge and mature, the need for P&Ls and other financial data grows. The accounting estimates and methods used to prepare these P&Ls evolve and change for similar reasons. In recent years, Google has prepared P&Ls for different ads-related product areas, sometimes referred to as "Go/Ads" P&Ls, which, as of fiscal year 2024, include P&Ls for the

³⁷ Horngren's Cost Accounting, p. 655.

³⁸ GOOG-AT-MDL-008930610 at -0619 ("Internal income statements are presented in a way that focuses on the results and metrics that management uses to make business decisions, allocate resources, and gain insight into the overall health of the business. Internal operating results are also used by decision makers (including the Chief Operating Decision Maker) to evaluate the performance of reportable segments").

³⁹ In addition, Google prepares "external view" P&Ls that differ from internal P&Ls in certain respects (with respect to, for example, certain cost classifications). I understand that the "external view" P&Ls largely align with how Alphabet reports in its external financial statements (i.e., in conformity with U.S. GAAP). *See, e.g.*, Mok Deposition, p. 21:10–14 ("There are two standard P&L views... Q What are those? A One which we call the external view, and then one which we call the management view."), p. 100:12–13 ("A It has both an external view and a management view."), p. 21:16–19 ("A The external view treats -- the management view has a bucket of costs that we internally consider OpEx. The external view treats this pool of cost as cost of sales."), p. 157:22–24 ("A The ads P&L has the two views we talked about, one which aligns to external reporting and one which aligns to management reporting.").

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Search and Search Ads (presented as Search+), DVAA, YouTube, and Geo + Local (presented as Geo) product areas.⁴⁰

32. Google also prepares internal P&Ls for certain products within the DVAA product area (“DVAA product-level P&Ls”), recently (starting in 2021) based on [REDACTED] approach.⁴¹ As of fiscal year 2024, these P&Ls are prepared for AdSense, Google Ad Manager, AdMob, Google Ads, DV360, and CM360.⁴² [REDACTED] was retroactively prepared for 2020.⁴³ I understand that Google is [REDACTED] DVAA product-level P&Ls prior to 2020.⁴⁴

33. I further understand that [REDACTED] the Company prepared different forms of product-level P&Ls, either on an *ad hoc* basis⁴⁵ or, later, as part of an effort known as “Project Slice.”⁴⁶ I understand the early product-level P&Ls were limited, particularly with respect to cost allocations, and provided a limited view of the profitability of the different products; additionally, there is limited documentation of the methodology used to create these

⁴⁰ See, e.g., GOOG-AT-MDL-C-000018044; Mok Deposition, p. 154:16–18 (“A ... [T]here’s a central ads team that makes a document called go/ads P&L, which is the aggregated ads P&L that’s the next level up from DVAA”). Throughout this report, I refer to the “Annual Ads” P&Ls, which contain P&Ls for ads-related product areas, as “Go/Ads” P&Ls (some of the documents contain a tab explicitly labelling the P&Ls as “go/ads” or “go/adspnl,” while others do not). See, e.g., GOOG-AT-MDL-009709864; GOOG-AT-MDL-008927854.

⁴¹ Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 12 (“In 2021, Google developed and implemented a [REDACTED] view for determining the financial metrics for Google Ad Tech Products, which Google subsequently applied to 2020 product-level data in the ordinary course. A [REDACTED]”). Throughout this report, I refer to DVAA product-level P&Ls and “management view” P&Ls in “Go/Ads” P&Ls as “internal DVAA P&Ls.”

⁴² See, e.g., GOOG-AT-MDL-C-000018256.

⁴³ Mok Deposition, p. 81:17–21 (“Q And when was the shift? A We started laying the groundwork for this in ... early 2021 time frame. Q And when was it implemented? A Sometime in 2021.”); Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 12.

⁴⁴ Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 12 (“Prior to [REDACTED] costs and revenue were allocated to these [DVAA] products based on a buy-side or sell-side view rather than the specific product. Google is limited in its ability to retroactively apply the current methodology, as the data used by the current methodology may not be available for earlier years, and the assumptions supporting the methodology may not be appropriate in light of the many changes to Google’s business over fifteen years. As a result, Google cannot provide MECE financial metrics for the 2007-2019 period.”).

⁴⁵ See, e.g., GOOG-AT-MDL-004039971. See also Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 14 (“Current Google Finance personnel are unaware of a centralized effort to examine or create product-level P&Ls prior to 2017 but ... certain pre-2017 ad hoc documents contain some information on product-level profits.”).

⁴⁶ Mok Deposition, p. 126:22–24 (“Project Slice was our project name for taking the aggregate DVAA P&L and trying to slice it more granularly”); Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 14 (“These documents relate to a Google effort between 2017 to 2019, known as ‘Project Slice,’ to begin to develop profit and loss statements at the product level for certain Google Ad Tech Products.”).

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P&Ls.⁴⁷ I further understand that more recent “Project Slice” P&Ls “were based on imperfect approximations of how revenue, profit, and/or cost could be allocated across products.”⁴⁸ As noted below and is generally true, changes in the preparation of product-level P&Ls reflect the evolution of the business and the products over time as the business grew and matured.

34. Internal DVAA P&Ls typically include certain direct costs and allocated indirect costs;

[REDACTED]

[REDACTED]

[REDACTED].⁴⁹

Internal DVAA P&Ls typically report line item detail, which allows different users to make adjustments and prepare specific profitability measures that best suit their purposes. Various methods are used to [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].⁵⁰ The methods used to allocate costs to product areas and products changed over time to reflect changes in the underlying businesses, products, and how they are organized and managed, as well as to improve the quality of the allocations (e.g., in attempts to better reflect the underlying cost drivers as well as ownership of the relevant costs).⁵¹ I understand that, at least for some period, certain DVAA product-level P&Ls were prepared monthly and included

⁴⁷ See, e.g., GOOG-DOJ-AT-02645470 at -5472 (“We have a preliminary view of the profitability by each buy-side product, but it’s being refined”); GOOG-AT-MDL-004021793 at -1796 (“Product level allocations need continued tweaking ([REDACTED])”); GOOG-DOJ-AT-02642407 at p. 5 (“Resource allocation across buy-side products (e.g. Eng/PM HC) could be improved”). See also GOOG-AT-MDL-019564626 at -4632 (“[T]here are documents in Google’s productions containing product-level financial metrics pre-2018... Google has not been able to identify current Google Finance personnel with first-hand knowledge of these documents or otherwise identify the process and methodology used in preparing these documents.”).

⁴⁸ Google’s Responses to Plaintiffs’ Second Set of Interrogatories, p. 13.

⁴⁹ Accountants recognize costs as expenses (on the P&L) when the associated economic resources are consumed (e.g., the cost associated with long-lived assets such as buildings and equipment is recognized as depreciation expense periodically over the useful life of the asset).

⁵⁰ GOOG-AT-MDL-009017857 at -7871–7872; GOOG-AT-MDL-009709671 at -9675 (“[REDACTED]”).

[REDACTED]. See also Mok Deposition, p. 52:12–20 (“Machines, resources, and costs are managed by different engineers in -- in groups of services we call anchors. The anchors -- some of the anchors are dedicated to certain products and businesses, and the dedicated ones get attributed to those P&Ls. The majority of the anchors are shared services across products, and the -- the managers of those anchors work with the engineering leaders in the products to propose and vet and agree on the cost allocation of those anchors.”).

⁵¹ See, e.g., GOOG-AT-MDL-009068311 at -8314 (“Summary of Approved Changes (2020+)”); GOOG-DOJ-AT-02643272 at pp. 6–7 (“Allocation Change Details ... Allocations Going Forward”); GOOG-DOJ-06206871 at -6881. See also Mok Deposition, p. 78:9–15 (“Q And what drove the change in 2019? A Same as I said, that allocation changes are driven by we want to have better allocation -- better allocations that are -- it’s more clear what’s driving the cost is one factor, and then the other one is trying to balance that against a really simple, clear allocation methodology.”).

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actuals for the prior months (of a given fiscal year) and forecasts for the remaining months (of the fiscal year).⁵²

35. As with many organizations, Google’s internal P&Ls are created and used for a variety of purposes. As Jessica Mok, the former finance director for DVAA,⁵³ explained, internal DVAA P&Ls are prepared to provide senior leaders in the display business with “visibility into the [DVAA] business economics” to inform their business decisions.⁵⁴

36. Because internal DVAA P&Ls are primarily used for internal decisions, they do not (and are not designed) to [REDACTED] to operate and manage the relevant business or product. As I discuss below, while the internal DVAA P&Ls I have reviewed include certain [REDACTED]

[REDACTED].⁵⁵

VII. Summary of Mr. Andrien’s Financial Analyses

37. I understand that Mr. Andrien was asked to “analyze certain factors that [he] understand(s) are relevant to determining the applicable statutory penalties” that Plaintiffs are seeking in this matter “under each State’s deceptive trade practices statutes.”⁵⁶ I further understand that Mr. Andrien does not address Plaintiffs’ antitrust claims.⁵⁷

⁵² See, e.g., GOOG-AT-MDL-001056062 at -6062 (“The DVAA P&L is run monthly following each financial forecast cycle (V3, V8, etc.). Each V number reflects the month in which the forecast was completed and includes YTD actuals for n-1 and a financial forecast for the remainder of the year.”). See also Mok Deposition, p. 30:8–10 (“Each number reflects the month in which -- that it was produced; so the first number, V5, is Version 5, May of that year.”).

⁵³ Mok Deposition, p. 12:19–25 (“Q ... what was your last role at -- in this display ads business? A I was the finance director for display ads. Q And that was between what time? A November 2021 until I left the role in August 2023.”). I understand that Mok now has the same role for Google’s Maps business. See Mok Deposition, pp. 11:19–12:5 (“Q What is your position? A I’m a finance director. ... Q What business units do you oversee? A Currently, Google Maps. I -- prior to that, at -- before August 2023, I worked on the display ads business.”).

⁵⁴ Mok Deposition, pp. 24:4–25:2 (“Q Who were these P&Ls sent to? A Generally, senior leaders in the display business, primarily product and engineering leadership. ... A The -- I would say my team produced P&Ls for visibility into the business economics -- for senior leaders to have visibility into the business economics. ... At times, the visibility was an input to their business decision.”). See also GOOG-AT-MDL-002182530; GOOG-DOJ-11916795, showing data from the internal DVAA P&Ls being shared with senior leadership.

⁵⁵ As aforementioned, cost allocation methods changed over time and, as a result, the extent to which [REDACTED] are not reflected in internal DVAA P&Ls changed over time. For example, as I explain below,

[REDACTED] See, e.g., GOOG-AT-MDL-003206332 at -6335–6336 (“

⁵⁶ Andrien Report, ¶ 7.

⁵⁷ Andrien Report, ¶ 7, note 4 (“The Plaintiff States have also brought antitrust claims against Google in this matter; however, my opinions are limited to those claims related to deceptive trade practices.”).

38. Mr. Andrien offers certain analyses and measures that, in his view, are relevant to assessing the financial performance of Alphabet, Google’s advertising business, and Google’s display advertising business for the 2013–2023 period, and opines that these analyses “establish[] Google as [a] highly profitable and successful company during the relevant period and inform[] the amount necessary to deter Google’s misconduct and its ability to pay” a civil penalty.⁵⁸

39. Mr. Andrien puts forth estimates of DVAA revenue and profit attributable to each of the Plaintiff States and in total for these states (his Table 1).⁵⁹ Mr. Andrien first relies on certain internal DVAA P&Ls to measure revenue and operating profit for specific DVAA products.⁶⁰ He then uses those amounts to estimate the revenue and operating profit for the U.S. portion of the Company’s business, based on what Alphabet reports for revenue in each geographic region, including the U.S., in Form 10-K filings.⁶¹ He then allocates these amounts to the Plaintiff States by applying the fraction of internet subscribers in each of these states to the total number of internet subscribers in the U.S. (using American Community Survey (“ACS”) data).⁶² Based on these calculations, Mr. Andrien’s Table 1 purports to represent the total revenue and operating profit for what he calls Display Advertising for the Plaintiff States in each year from 2013 through 2023.⁶³

40. In addition, Mr. Andrien summarizes certain financial measures that Alphabet reports in its financial statements, including revenue, operating income and operating margin, net income and net income margin; reported balance sheet numbers for cash, cash equivalents,

⁵⁸ Andrien Report, ¶ 77.

⁵⁹ Andrien Report, ¶ 94–95, Table 1.

⁶⁰ Andrien Report, ¶ 92. Mr. Andrien includes revenue and operating profit from P&Ls for the following products: AdSense for Content, AdX, DoubleClick Bid Manager, AdMob, DoubleClick for Publishers, AdServing, Ad Manager, AwBid, Display & Video 360, Campaign Manager, and Google Ads. For 2023 Mr. Andrien uses the revenue and operating profit numbers for 2022 ostensibly because the P&Ls available to him in production did not include data for 2023 for the products in his analysis. *See* Andrien Report, ¶ 92.

⁶¹ Andrien Report, ¶ 93. I understand that Mr. Andrien calculates these estimates by multiplying his measures of revenue and operating profit for the different DVAA products by the fraction of Alphabet’s worldwide revenue attributable to the U.S. in each year. *See* Andrien Report, ¶ 93.

⁶² Andrien Report, ¶ 94. I understand that Mr. Andrien narrows his estimates to the Plaintiff States by multiplying the revenue and operating profit measures specific to the U.S. from the prior step by his estimated ratios for each of the Plaintiff States (Mr. Andrien estimates the number of internet subscribers in each state by multiplying the share of each state’s households that have an internet subscription, as provided by the ACS, by the population of the state, which he then uses to estimate, for each Plaintiff State, the ratio of people in the state with an internet subscription to the total number of internet subscribers for the U.S. as a whole). For 2023, Mr. Andrien uses the same ratio he estimates for 2022, as the U.S. Census Bureau has not yet released 2023 ACS data. *See* Andrien Report, ¶ 94.

⁶³ Andrien Report, ¶ 95, Table 1.

and short-term marketable securities; along with stock price and market capitalization at certain points in time.⁶⁴

41. Specifically, Mr. Andrien presents Alphabet company-wide reported revenue, operating income, and net income for its 2013–2023 fiscal years, as well as growth rates (CAGRs) for these measures over this period, and in some cases totals for these numbers aggregated across this period.⁶⁵ He also presents year-end balances for Alphabet’s cash, cash equivalents, and short-term marketable securities as of its 2013–2023 fiscal year-ends (as well as for the quarter ended March 31, 2024), along with the simple growth rate for these amounts over the same period.⁶⁶

42. Mr. Andrien purports to compare Alphabet’s financial performance and growth to that of other companies. He compares the performance of Alphabet’s stock to that of the S&P 500 and Nasdaq Composite, stating that Alphabet’s stock price growth for the January 2, 2013 to June 3, 2024 period was “3.28 times the growth of the S&P 500 and 1.95 times the growth of the Nasdaq Composite over the same period.”⁶⁷ He notes that Alphabet “is the fourth largest company by market capitalization in the world” and that its market capitalization exceeds that of certain other companies combined.⁶⁸

43. Mr. Andrien also presents certain financial metrics for Google’s advertising business as a whole, which, as I explain below, are predominantly attributable to products not part of DVAA.⁶⁹ Mr. Andrien reports Google’s advertising revenue, the ratio of advertising revenue to revenue for the Company as a whole, an estimate of the operating profit Google earns from advertising, and an estimate of the ratio of Google’s operating profit from advertising to Alphabet’s overall operating profit, for each year from 2013–2023.⁷⁰ I understand that Mr. Andrien purports to estimate the operating profit for Google’s advertising business overall (including Search) in each year by multiplying Google’s total advertising revenue by the operating margin the Company reports for the Google segment (for 2013–2017) and for the Google Service segment (for 2018–2023).⁷¹

⁶⁴ Andrien Report, § IV.A. Stock price and market capitalization data are not usually reported in financial statements and are, I understand, obtained from separate sources. Mr. Andrien sometimes aggregates the Company’s cash and cash equivalents with its marketable securities; I note that the Company reports these separately in its financial statements. *See, e.g.*, Alphabet 2023 10-K, p. 51.

⁶⁵ Andrien Report, ¶¶ 78–80, Charts 1–3.

⁶⁶ Andrien Report, ¶ 81, Chart 4.

⁶⁷ Andrien Report, ¶ 83.

⁶⁸ Andrien Report, ¶¶ 84–85.

⁶⁹ Andrien Report, ¶¶ 86–90.

⁷⁰ Andrien Report, ¶¶ 86–90, Charts 8–10.

⁷¹ Andrien Report, ¶ 87.

44. Finally, Mr. Andrien presents a series of financial ratios and metrics he claims are relevant to assessing the “effect” on Google’s profitability, financial position, liquidity, and cash flow if Google were to pay a civil penalty of \$29.08 billion. He claims that the effect of paying this penalty “would not be so burdensome as to impact the day-to-day operations of the company or bankrupt Google.”⁷² In regards to profitability, Mr. Andrien presents the purported effect on Alphabet’s EBIT and EBIT margin, EBITDA and EBITDA margin, net income and net income margin, and earnings per share for fiscal year 2023, had the proposed penalty been imposed and paid in this period.⁷³ In regards to the effect on financial position and liquidity, Mr. Andrien presents the purported change in Alphabet’s cash and cash equivalents, current assets, total assets, current ratio (i.e., current assets divided by current liabilities), and cash ratio (i.e., cash and cash equivalents divided by current liabilities) as of March 31, 2024, assuming the proposed penalty had been imposed and paid on that date.⁷⁴ Mr. Andrien acknowledges that his proposed penalty exceeds Alphabet’s entire balance of cash and cash equivalents but nevertheless opines that the penalty “would not cause Google any operational challenges, liquidity needs, or solvency concerns” because, according to him, the fact that Alphabet’s board recently authorized a \$70 billion share repurchase “indicates that Google has already determined that it can continue operating even with a \$70 billion reduction in its current assets.”⁷⁵ Lastly, Mr. Andrien presents the purported change in Alphabet’s operating cash flow for fiscal year 2023, assuming payment of the proposed penalty during that period.⁷⁶

VIII. Mr. Andrien’s Analyses of the Financial Performance of Google’s DVAA Business Are Flawed and Unreliable

45. As described above, Mr. Andrien presents an analysis of the financial performance of DVAA to purportedly estimate revenue and operating profit generated by DVAA in the Plaintiff States.

46. Mr. Andrien opines that DVAA operating profit is an “inadequate and inappropriate proxy for the overall benefit, both direct and indirect, that Google has gained from the

⁷² Andrien Report, ¶ 131.

⁷³ Andrien Report, ¶ 134, Table 5.

⁷⁴ Andrien Report, ¶ 138, Table 6.

⁷⁵ Andrien Report, ¶ 139.

⁷⁶ Andrien Report, ¶ 140, Table 7.

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misconduct”⁷⁷ and instead “consider(s)” DVAA revenue in “assessing the total penalty necessary to eliminate Google’s financial incentive to engage in the alleged misconduct.”⁷⁸ At least in part, Mr. Andrien’s basis for this appears to be his view that the operating profit of DVAA “does not measure the totality of Google’s benefit from its misconduct nor its ability to leverage its gains from this misconduct.”⁷⁹ He also asserts that “Google’s past operating profit in the display advertising segment ignores the future gains that Google stands to make by virtue of its misconduct to date”⁸⁰ and appears to suggest that TAC should not be considered as a cost in calculating such benefits.⁸¹

47. As an initial matter, to the extent Mr. Andrien is claiming that measures of operating profitability are relevant in assessing these benefits, it is inappropriate to use measures of profitability that do not include *all* relevant costs that benefit the business. It is also unclear why projected future operating profits would be relevant to this assessment.

48. More generally, Mr. Andrien does not explain why operating profit is the appropriate accounting measure to assess any “overall benefit” to Google. When measuring the benefits that a company receives or “earns” from an economic activity, accountants and financial analysts typically use an entity’s (bottom-line) net income, which reflects all of the relevant costs including income taxes, interest, and other non-operating items.⁸² As a result, an entity’s net income (or “earnings”), including as reported under U.S. GAAP, is usually lower than its operating income (or profit).⁸³ As such, Mr. Andrien’s reliance on measures of DVAA operating profit to purportedly measure the benefits enjoyed by Google is inappropriate because these numbers do not reflect what DVAA and Google “earn” from the relevant economic activities and will tend to overstate such amounts. As **Table 2** shows, the net income reported by Alphabet in its Form 10-K filings is usually lower than the reported operating income.

⁷⁷ Andrien Report, ¶ 123.

⁷⁸ Andrien Report, ¶ 123.

⁷⁹ Andrien Report, ¶ 119.

⁸⁰ Andrien Report, ¶ 122.

⁸¹ Andrien Report, ¶ 120 (“Google’s ability to make these payments is key to their ability to continue to dominate the display ads ecosystem. This should be considered when accounting for the benefit Google has gained from its display advertising misconduct.”).

⁸² See, e.g., Joshua Rosenbaum and Joshua Pearl, *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions*, Second Edition (Hoboken, NJ: John Wiley & Sons, Inc., 2013), p. 37. See also Alphabet 2023 10-K, pp. 52, 76. Non-operating items include gains and losses as well as non-operating expenses.

⁸³ For example, Alphabet 2023 10-K reports operating income of \$84.3 billion and net income of \$73.8 billion, with the difference largely due to a \$11.9 billion income tax expense. See Alphabet 2023 10-K, p. 52.

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Table 2
Alphabet/Google: Operating Income and Net Income, 2013–2023

<i>in millions</i>	2013	2014	2015	2016	2017
Operating Income	\$15,403	\$16,496	\$19,360	\$23,716	\$26,178
Net Income	\$12,733	\$14,136	\$16,348	\$19,478	\$12,662

<i>in millions</i>	2018	2019	2020	2021	2022	2023
Operating Income	\$27,524	\$34,231	\$41,224	\$78,714	\$74,842	\$84,293
Net Income	\$30,736	\$34,343	\$40,269	\$76,033	\$59,972	\$73,795

Source: Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note: This table contains data for each fiscal year drawn from the most recent Form 10-K filing that reported the relevant segment-level data (e.g., data for 2021 drawn from 2023 10-K). Net income and operating income as reported in Alphabet Form 10-K filings.

49. Putting aside the appropriateness and relevance of the metrics he analyzes, Mr. Andrien fails to acknowledge limitations of his measures of revenue and operating profit for DVAA. First, he fails to acknowledge that the inputs to his measures tend to overstate the relevant numbers because they include products not at issue in this matter. As noted in Section IV, I understand that certain DVAA products, such as CM360, AdMob, and AdSense, are not at issue in this matter. As such, financial results for these products should be excluded from any analysis of financial performance; because Mr. Andrien fails to do this, his measures of revenue and operating profit are overstated.

50. **Table 3** shows how Mr. Andrien’s estimates of booked revenue and operating profit for fiscal years 2020–2022, reported in Exhibit 2 of his report, would change if I limit his analyses to the at-issue DVAA products, i.e., to Google Ad Manager, Google Ads, and DV360. If I use the internal DVAA P&Ls that Mr. Andrien relies on (although, as I explain below, some of his P&L choices are unsupported), **Table 3** shows that Mr. Andrien’s estimates of annual DVAA revenue are consistently overstated—by [REDACTED] or more—for fiscal years 2020, 2021, and 2022, as a result of including DVAA products that are not at issue. Similarly, Mr. Andrien’s analysis overstates annual operating profits, for example, by [REDACTED] in fiscal year 2020 (the operating profit for the DVAA products at issue [REDACTED] in fiscal year 2020) and by at least [REDACTED] in both fiscal years 2021 and 2022. Moreover, the revenue numbers reported here for the at-issue products are overstated in that, as I understand it, they include revenue from certain types of transactions that are not part of the allegations in this matter (i.e., in-app transactions).

[illegible]

Note:

[3] The 2022 V10 P&L used by Mr. Andrien contains actuals for 9 months and forecasts for the remaining 3 months of 2022.

52. For example, I understand that certain costs necessary to support Alphabet, Google, and its constituent businesses broadly were typically not allocated to the segments and/or product areas (and so not allocated to products). [REDACTED]

AT-02645766 at -5771. *See also* Alphabet 2023 10-K, p. 86, which indicates that certain costs associated with Google DeepMind were moved from the segment level to the Alphabet level during 2023.

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2023, respectively.⁸⁵ If the purpose of Mr. Andrien’s analysis is to assess the profitability of Google’s DVAA business, some portion of these costs would be appropriately assigned to this business. As a result, measures of operating profit that rely on internal DVAA P&Ls will tend to overstate the profitability of DVAA.

53. Further, based on my understanding of [REDACTED]
[REDACTED]

[REDACTED].⁸⁷ Although [REDACTED]
[REDACTED]
[REDACTED].⁸⁸ [REDACTED]
[REDACTED]
[REDACTED]

54. Mr. Andrien fails to acknowledge or account for these costs, resulting in measures of DVAA profitability that are overstated relative to those obtained from P&Ls that reflect these costs, including those prepared on a standalone basis.

55. In addition, in measuring revenue and operating profit for fiscal year 2022, Mr. Andrien relies on contemporaneous forecasts rather than actuals. Specifically, the internal DVAA P&L he relies on for fiscal year 2022 contains nine months of actual results and three months of forecast data.⁹⁰ Mr. Andrien fails to explain why he uses forecast data rather than actuals or why this is appropriate for his intended purpose, nor does he acknowledge that this choice, as shown below, results in him overstating the operating profit of DVAA for fiscal year 2022.

⁸⁵ Alphabet 2023 10-K, p. 86. *See also* Alphabet 2023 10-K, p. 39 (“For the year ended December 31, 2023, Alphabet-level activities include charges related to the reduction in force and our office space optimization efforts totaling \$3.9 billion. In addition, for the year ended December 31, 2023, we incurred \$269 million in accelerated rent and accelerated depreciation.”).

⁸⁶ GOOG-AT-MDL-009709671 at -0676.

⁸⁷ GOOG-AT-MDL-006876286 at -6317. *See also* Mok Deposition, p. 84:15–20 ([REDACTED]).

⁸⁸ GOOG-AT-MDL-003206332 at -6335–6336 (“[REDACTED]”). *See also* GOOG-AT-MDL-009709671 at -0676 ([REDACTED]).

⁸⁹ *See, e.g.*, GOOG-AT-MDL-003206332 at -6337–6338.

⁹⁰ GOOG-DOJ-AT-02649870; Andrien Report, Exhibit 2; Mok Deposition, p. 30:7–10 (“Q [REDACTED].”).

56. This choice is also important because Mr. Andrien does not use actual (or forecast) results for fiscal year 2023. Instead, he assumes the P&L numbers for fiscal year 2023 are the same as those for fiscal year 2022, a choice he deems “conservative[.]”⁹¹ In fact, I understand that DVAA booked revenue for fiscal year 2023 was approximately [REDACTED], [REDACTED] than for fiscal year 2022 and approximately [REDACTED] than the 2022 number assumed by Mr. Andrien.⁹² Further, I understand that DVAA’s operating profit for fiscal year 2023 was approximately [REDACTED] than that used by Mr. Andrien, which means that his measures [REDACTED] DVAA’s operating profitability for fiscal year 2023.⁹³

57. **Table 4A** presents measures of revenue and operating profit for the at-issue DVAA products based on the most recent internal DVAA P&Ls and compares them to the corresponding numbers that Mr. Andrien presents in Exhibit 2 of his report. Together, **Tables 3** and **4A** show that the choices made by Mr. Andrien—to include DVAA products not at issue and rely on the 2022 number detailed above for fiscal years 2022 and 2023—result in him presenting measures that consistently and substantially overstate the revenue and operating profit attributable to the at-issue products.⁹⁴ Specifically, Mr. Andrien’s annual booked revenue numbers put forth in his Exhibit 2 [REDACTED] [REDACTED] in each fiscal year during the 2020–2023 period. Similarly, Mr. Andrien’s operating profit numbers [REDACTED] each fiscal year during the 2020–2023 period and [REDACTED] over the entire period. In fact, operating profit for the at-issue DVAA products [REDACTED] [REDACTED]. Moreover, because Mr. Andrien relies on numbers from his Exhibit 2 to generate the revenue and operating profit purportedly attributable to the Plaintiff States in his Table 1, he also, as shown in **Table 4B**, overstates revenue and operating profit for the at-issue DVAA products in his Table 1.⁹⁵ Moreover, as previously discussed, the numbers in **Tables 4A** and **4B** overstate operating profitability

⁹¹ Andrien Report, ¶ 92.

⁹² GOOG-AT-MDL-C-000018044; GOOG-AT-MDL-C-000018256; Andrien Report, Exhibit 2.

⁹³ GOOG-AT-MDL-C-000018256; Andrien Report, Exhibit 2.

⁹⁴ I understand that [REDACTED]

⁹⁵ Andrien Report, Table 1.

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_____.

Table 4A

Algeria						
Year	Population (millions)	Population (millions)	Population (millions)	Population (millions)	Population (millions)	Population (millions)
2010	34.0	34.0	34.0	34.0	34.0	34.0
2011	34.0	34.0	34.0	34.0	34.0	34.0
2012	34.0	34.0	34.0	34.0	34.0	34.0
2013	34.0	34.0	34.0	34.0	34.0	34.0
2014	34.0	34.0	34.0	34.0	34.0	34.0
2015	34.0	34.0	34.0	34.0	34.0	34.0
2016	34.0	34.0	34.0	34.0	34.0	34.0
2017	34.0	34.0	34.0	34.0	34.0	34.0
2018	34.0	34.0	34.0	34.0	34.0	34.0
2019	34.0	34.0	34.0	34.0	34.0	34.0
2020	34.0	34.0	34.0	34.0	34.0	34.0
2021	34.0	34.0	34.0	34.0	34.0	34.0
2022	34.0	34.0	34.0	34.0	34.0	34.0
2023	34.0	34.0	34.0	34.0	34.0	34.0
2024	34.0	34.0	34.0	34.0	34.0	34.0
2025	34.0	34.0	34.0	34.0	34.0	34.0
2026	34.0	34.0	34.0	34.0	34.0	34.0
2027	34.0	34.0	34.0	34.0	34.0	34.0
2028	34.0	34.0	34.0	34.0	34.0	34.0
2029	34.0	34.0	34.0	34.0	34.0	34.0
2030	34.0	34.0	34.0	34.0	34.0	34.0
2031	34.0	34.0	34.0	34.0	34.0	34.0
2032	34.0	34.0	34.0	34.0	34.0	34.0
2033	34.0	34.0	34.0	34.0	34.0	34.0
2034	34.0	34.0	34.0	34.0	34.0	34.0
2035	34.0	34.0	34.0	34.0	34.0	34.0
2036	34.0	34.0	34.0	34.0	34.0	34.0
2037	34.0	34.0	34.0	34.0	34.0	34.0
2038	34.0	34.0	34.0	34.0	34.0	34.0
2039	34.0	34.0	34.0	34.0	34.0	34.0
2040	34.0	34.0	34.0	34.0	34.0	34.0
2041	34.0	34.0	34.0	34.0	34.0	34.0
2042	34.0	34.0	34.0	34.0	34.0	34.0
2043	34.0	34.0	34.0	34.0	34.0	34.0
2044	34.0	34.0	34.0	34.0	34.0	34.0
2045	34.0	34.0	34.0	34.0	34.0	34.0
2046	34.0	34.0	34.0	34.0	34.0	34.0
2047	34.0	34.0	34.0	34.0	34.0	34.0
2048	34.0	34.0	34.0	34.0	34.0	34.0
2049	34.0	34.0	34.0	34.0	34.0	34.0
2050	34.0	34.0	34.0	34.0	34.0	34.0
2051	34.0	34.0	34.0	34.0	34.0	34.0
2052	34.0	34.0	34.0	34.0	34.0	34.0
2053	34.0	34.0	34.0	34.0	34.0	34.0
2054	34.0	34.0	34.0	34.0	34.0	34.0
2055	34.0	34.0	34.0	34.0	34.0	34.0
2056	34.0	34.0	34.0	34.0	34.0	34.0
2057	34.0	34.0	34.0	34.0	34.0	34.0
2058	34.0	34.0	34.0	34.0	34.0	34.0
2059	34.0	34.0	34.0	34.0	34.0	34.0
2060	34.0	34.0	34.0	34.0	34.0	34.0
2061	34.0	34.0	34.0	34.0	34.0	34.0
2062	34.0	34.0	34.0	34.0	34.0	34.0

Source: GOOG-DOJ-AT-02649870; GOOG-AT-MDL-009643893; GOOG-AT-MDL-C-000018256;
Andrien Report

Note:

[1] Numbers are drawn from Andrien Report Exhibit 2. The DVAA product-level P&Ls used by Mr. Andrien for 2020–2023 are AdMob, AdSense, Google Ad Manager, Google Ads, DV360, and CM360. The 2022 V10 P&L used by Mr. Andrien contains actuals for 9 months and forecasts for the remaining 3 months of 2022.

[2] At-Issue DVAA Products are Google Ad Manager, Google Ads, and DV360. Numbers for 2020–2022 are drawn from the 2023 V8 P&L, which contains actuals for 2020–2022. Numbers for 2023 are drawn from the 2024 V4 P&L, which contains actuals for 2023.

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Table 4B
DVAA Booked Revenue and Operating Profit Attributable to Plaintiff States per Mr. Andrien’s Methodology, 2020–2023

		</				

Source: GOOG-DOJ-AT-02649870; GOOG-AT-MDL-009643893; GOOG-AT-MDL-C-000018256; Alphabet 2022 10-K; Alphabet 2023 10-K; ACS; Andrien Report

Note:

[1] Numbers are drawn from Andrien Report Table 1. The DVAA product-level P&Ls used by Mr. Andrien for 2020–2023 are AdMob, AdSense, Google Ad Manager, Google Ads, DV360, and CM360. The 2022 V10 P&L used by Mr. Andrien contains actuals for 9 months and forecasts for the remaining 3 months of 2022.

[2] Numbers calculated by multiplying the numbers for At-Issue DVAA Products by the respective ratios that Mr. Andrien uses for each year to apportion the numbers in his Exhibit 2 to numbers purportedly attributable to the Plaintiff States as presented in the Andrien Report Table 1. [REDACTED]

IX. Mr. Andrien's Assertions Regarding the Financial Performance of Alphabet and Google's Advertising Business Are Flawed

58. In addition to an analysis of the financial performance of Google’s DVAA business, Mr. Andrien puts forth a number of analyses of different financial measures for Alphabet overall and for Google’s advertising business. Mr. Andrien appears to rely on such calculations to support certain conclusions, including that “Google’s financial performance

during the period 2013 to present has been extraordinary” and that “Google’s growth and profitability have been driven by advertising.”⁹⁶

59. Mr. Andrien fails to explain why his purported analysis of the financial performance of Alphabet and of Google’s advertising business is relevant to his opinions. My understanding is that only certain products within DVAA, which itself is only a portion of Google’s advertising business, are at issue in this matter. As such, any analysis that measures and reflects the performance of Google’s advertising business in its entirety is overinclusive, in that it includes revenue and operating profit for products not at issue in this matter, including Google’s owned & operated properties, such as Search and YouTube. As such, Mr. Andrien appears to conflate the performance of the at-issue DVAA products with that of the entirety of Google’s advertising business. Similarly, measures of the performance of Alphabet as a whole (such as company-wide revenue or operating income) reflect the economic contributions of a multitude of Alphabet products and services unrelated to the allegations or even to DVAA.

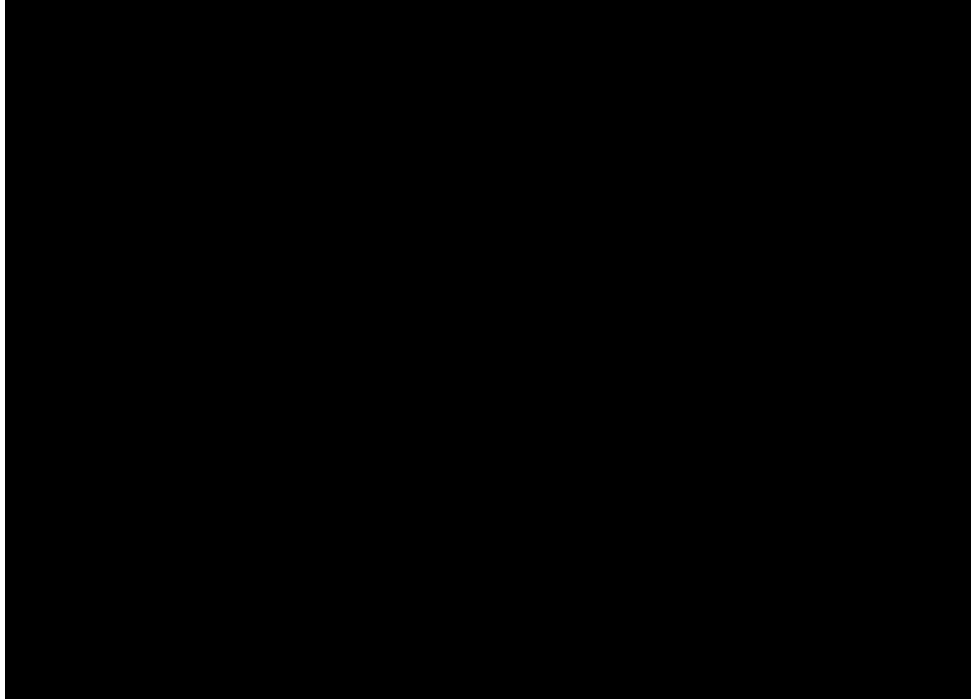
60. DVAA represents a relatively modest fraction of Google’s overall advertising business. As shown in **Table 5A**, for fiscal years 2018 through 2023 DVAA represented [REDACTED]

[REDACTED] as reported in the Company’s Go/Ads P&Ls.⁹⁷

⁹⁶ Andrien Report, ¶ 11.

⁹⁷ GOOG-AT-MDL-C-000018044. As shown in **Table 5B**, the results for revenue are similar using figures from Alphabet Forms 10-K.

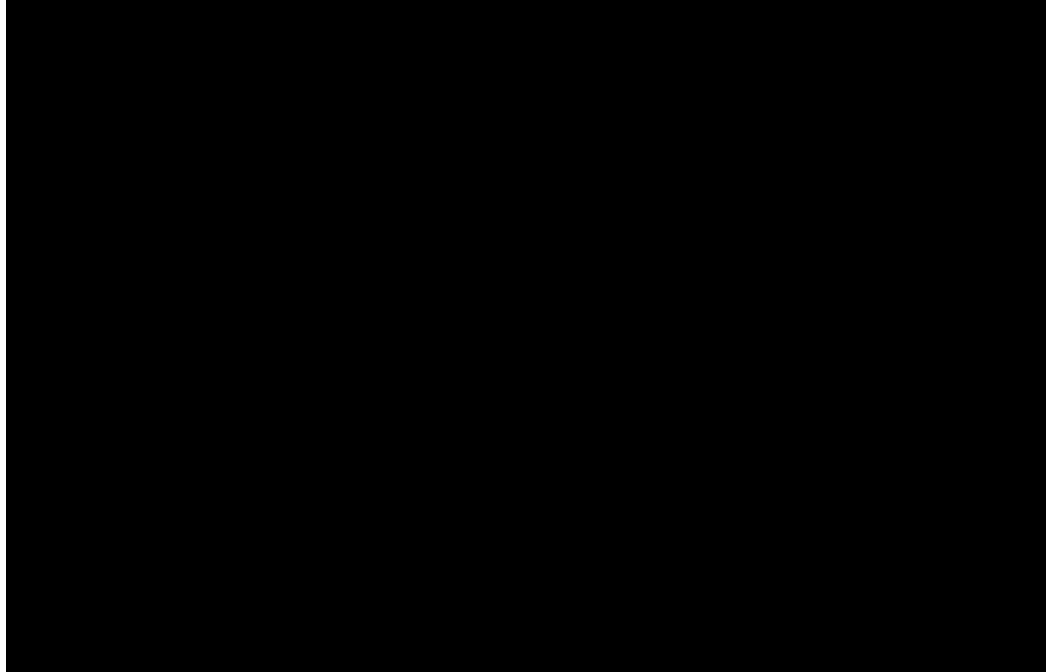
Figure 1A
Revenue for DVAA as a Percentage of Revenue for Google’s Ads Business as a Whole, 2014–
2023



Source: GOOG-AT-MDL-008927854; GOOG-AT-MDL-008928775; GOOG-AT-MDL-008928776;
GOOG-AT-MDL-008928778; GOOG-DOJ-AT-02647833; GOOG-AT-MDL-009709864; GOOG-AT-MDL-
C-000018044

Note: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Figure 1B
**Operating Profit for DVAA as a Percentage of Operating Profit for Google’s Ads Business as
a Whole, 2014–2023**



Source: GOOG-AT-MDL-008927854; GOOG-AT-MDL-008928775; GOOG-AT-MDL-008928776;
GOOG-AT-MDL-008928778; GOOG-DOJ-AT-02647833; GOOG-AT-MDL-009709864; GOOG-AT-MDL-
C-000018044

Note: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

62. Mr. Andrien appears to use his purported analysis of the performance of Google’s advertising business as the basis for an opinion that the at-issue businesses represent a large or significant portion of Alphabet’s overall business.⁹⁹ This is simply not the case. As shown in **Table 5B**, for fiscal years 2018 through 2023, Google Network revenue represented approximately 10–15% of Alphabet’s overall revenue and approximately 13–17% of its overall ad revenue, based on numbers reported in its Form 10-K filings. Mr. Andrien fails to

⁹⁹ See, e.g., Andrien Report, Charts 8 and 10 (showing advertising representing 82% [REDACTED] of Alphabet total revenue and operating profit, respectively).

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explain why analyzing the performance of Alphabet as a whole or of Google's entire advertising business is relevant when the at-issue products represent only a relatively small portion of these businesses. I further note that Google Network revenue is itself overinclusive; it includes revenue from products that are not part of DVAA¹⁰⁰ and, as explained above, it also includes certain DVAA products that I understand are not at issue in this case.

Table 5B
Google Segment
Revenue Breakdown, 2013–2023

<i>in millions</i>	2013	2014	2015	2016	2017
Google Network	\$13,650	\$14,539	\$15,033	\$15,598	\$17,616
Google Advertising	\$51,072	\$59,624	\$67,390	\$79,383	\$95,577
Google Network %	27%	24%	22%	20%	18%
Alphabet	\$55,519	\$66,001	\$74,989	\$90,272	\$110,855
Google Network %	25%	22%	20%	17%	16%

<i>in millions</i>	2018	2019	2020	2021	2022	2023	Total
Google Network	\$20,010	\$21,547	\$23,090	\$31,701	\$32,780	\$31,312	\$236,876
Google Advertising	\$116,461	\$134,811	\$146,924	\$209,497	\$224,473	\$237,855	\$1,423,067
Google Network %	17%	16%	16%	15%	15%	13%	17%
Alphabet	\$136,819	\$161,857	\$182,527	\$257,637	\$282,836	\$307,394	\$1,726,706
Google Network %	15%	13%	13%	12%	12%	10%	14%

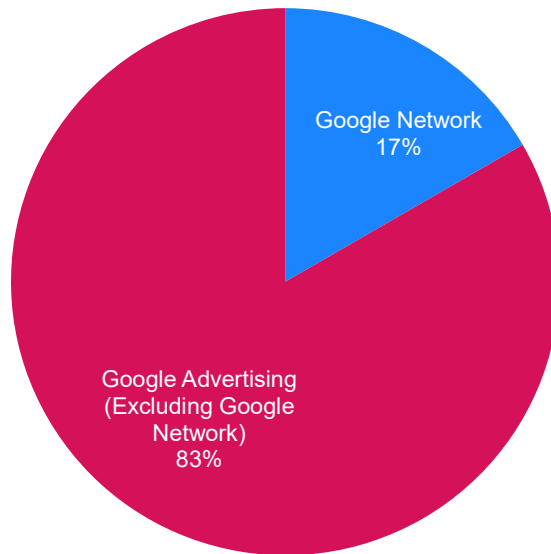
Source: Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note: This table contains data for each fiscal year drawn from most recent Form 10-K filing that reported segment-level data (e.g., data for 2021 drawn from 2023 10-K). Revenue as reported in Alphabet Form 10-K filings.

63. **Figures 2A and 2B** depict the total revenue generated by Google Network relative to Google's total advertising revenue and total Alphabet revenue, respectively, for fiscal years 2013 through 2023.

¹⁰⁰ As I explained above, Google Network is broader than DVAA as it includes revenue from certain products not generally considered part of Google DVAA, such as AdSense for Search. As such, DVAA revenue represents an even smaller share of Alphabet total revenue.

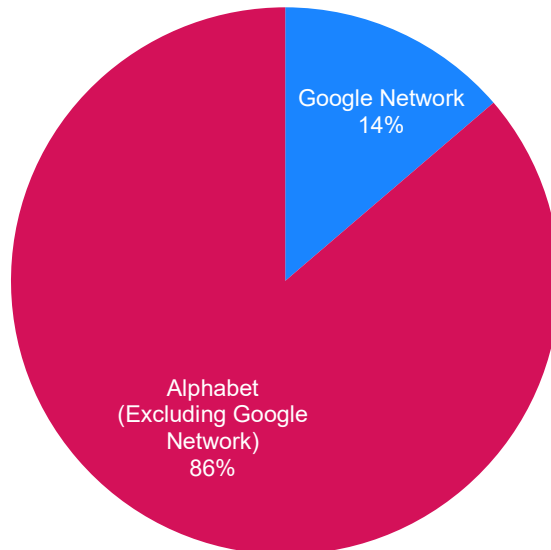
Figure 2A
Total Revenue for Google Network as a Percentage of Total Google Advertising Revenue,
2013–2023



Source: Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note: Total Revenue calculated as the sum of Revenues as reported for Google Advertising and Google Network in Alphabet Form 10-K filings for 2013–2023. Data for each fiscal year drawn from most recent Form 10-K filing that reported segment-level data (e.g., data for 2021 drawn from 2023 10-K).

Figure 2B
Total Revenue for Google Network as a Percentage of Alphabet Total Revenue, 2013–2023



Source: Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note: Total Revenue calculated as the sum of Revenues as reported for Alphabet and Google Network in Alphabet Form 10-K filings for 2013–2023. Data for each fiscal year drawn from most recent Form 10-K filing that reported segment-level data (e.g., data for 2021 drawn from 2023 10-K).

64. Mr. Andrien fails to provide any basis for his assessment that Google’s financial performance during the relevant period was “extraordinary” or why such “extraordinary” performance for a variety of Google businesses (many of which have little or nothing to do with DVAA) is informative or relevant to his opinions. As explained above, his basis for this claim largely appears to rest on a comparison of certain financial measures for Alphabet to the average of those for public companies that are represented in the S&P500 and Nasdaq Composite indices. As an initial matter, measures such as market capitalization are forward-looking and reflect stockholders’ expectations of future growth, while stock returns reflect

changes in stockholders’ expectations of an entity’s growth prospects.¹⁰¹ As a result, stock returns and market capitalization would seem to have little or no bearing on any purported benefits that resulted from Google’s alleged misconduct during the relevant period, assuming this is what Mr. Andrien is trying to measure. Further, Mr. Andrien fails to explain why the stock market performance of the collection of companies represented in these indices—which, among others, include manufacturers, banks, retailers, and energy companies¹⁰²—serves as a relevant benchmark for assessing the performance of Alphabet. Several of these companies are likely at different life-cycle stages and face different economic risks than Alphabet (and Google’s DVAA business). For example, these indices include mature companies such as Walgreens and General Mills as well as companies with cyclical businesses such as Chevron, Southwest Airlines, and Airbnb.¹⁰³

X. Mr. Andrien’s Analysis of the Economic Effect of the Proposed Penalty

65. In concluding his report, Mr. Andrien claims that a hypothetical \$29 billion penalty imposed on Google “would not be so burdensome as to impact the day-to-day operations of the company.”¹⁰⁴ Mr. Andrien fails to define or explain what he means by “day-to-day operations” (which, in my experience, is not a term of art in accounting, financial analysis, or financial economics). As a result, his conclusion that a \$29 billion penalty “would not...

¹⁰¹ It appears that Mr. Andrien computes returns for these indices without including dividends, a non-trivial component of investor returns. Had Mr. Andrien properly calculated returns to these indices (inclusive of dividends), he would have found that, over the period from January 2, 2013 to June 3, 2024, the cumulative returns to an investment in the S&P500 and Nasdaq Composite were 348.1% and 507.6%, respectively. These returns are calculated using the closing levels of the S&P 500 Total Return Index and those of the Nasdaq Composite Total Return Index, respectively, which incorporate reinvested dividends. *See Refinitiv*. These values are naturally higher than those reported by Mr. Andrien because of his omission. *See Andrien Report*, ¶ 83, Footnote 236 (“The S&P 500 (SPX) and the Nasdaq Composite (COMP) have grown 261.28% and 440.72% respectively since the first trading day of 2013.”). Because Alphabet paid its first-ever dividend on June 10, 2024, after the period Mr. Andrien evaluates, the dividend does not affect the Alphabet returns presented by Mr. Andrien. *See Alphabet Inc. Form 10-Q for the quarterly period ended March 31, 2024* (“Alphabet 2024 Q1 10-Q”), pp. 26, 33; *see also Alphabet Inc. Form 10-Q for the quarterly period ended June 30, 2024* (“Alphabet 2024 Q2 10-Q”), pp. 28, 37.

¹⁰² S&P Dow Jones Indices, “Equity: S&P 500®,” June 28, 2024, available at https://www.spglobal.com/spdji/en/idsenhancedfactsheet/file.pdf?calcFrequency=M&force_download=true&hostIdentifier=48190c8c-42c4-46af-8d1a-0cd5db894797&indexId=340, accessed on July 23, 2024; Nasdaq, “COMP: Nasdaq Composite: Industry Breakdown,” July 23, 2024, available at <https://indexes.nasdaqomx.com/Index/Breakdown/COMP>, accessed on July 23, 2024.

¹⁰³ *See, e.g.*, Walgreens Boots Alliance Inc. Form 10-K for the fiscal year ended August 31, 2023, p. 1; General Mills Inc. Form 10-K for the fiscal year ended May 28, 2023, p. 4; Chevron Corporation Form 10-K for the fiscal year ended December 31, 2023, pp. 3, 20–21; Southwest Airlines Co. Form 10-K for the fiscal year ended December 31, 2023, p. 3; Airbnb, Inc. Form 10-K for the fiscal year ended December 31, 2023, pp. 6, 10.

¹⁰⁴ Andrien Report, ¶ 131.

impact the day-to-day operations” of Google is not testable because it is not defined in a specific manner.

66. Mr. Andrien’s analysis of the “impact” of his proposed penalty does not appear to be based on any well-defined, supported methodology. While Mr. Andrien points to certain “metrics and ratios that financial analysts use to evaluate the economic and financial condition of a company” his basis for doing so is unclear; he indicates only that those metrics and ratios address “[s]ome key areas analysts **usually focus on.**”¹⁰⁵ He goes on to say that “[a]nalysts **sometimes** have preferences of certain metrics and ratios versus others but there is not a set of metrics or ratios that will capture the full information set of a company.”¹⁰⁶ In my view, this is not sufficient to justify or even explain how these ratios and measures can reliably inform his sweeping conclusions, including that a \$29 billion fine “would not impact” the Company’s “day-to-day operations.” Moreover, Mr. Andrien’s analysis fails to address certain important factors that would seem relevant to assessing the impact the proposed penalty may have on Alphabet and its shareholders.

67. Mr. Andrien fails to consider the magnitude of his proposed \$29 billion penalty relative to any relevant benchmarks, either for Alphabet as a whole or DVAA.

68. If we consider the Company’s capital expenditures, for example, Mr. Andrien’s proposed \$29 billion penalty is approximately the same magnitude as the Company’s total capital expenditures for fiscal year 2023 (of \$32.3 billion).¹⁰⁷ As I discuss below, if it were necessary to reduce these expenditures to finance (or partially finance) such a penalty, I understand, based on recent statements and disclosures by the Company, that it could have adverse consequences for the Company’s business, competitive position, and its ability to innovate.

69. Based on recent public disclosures, including its recent second quarter 2024 earnings results and call with investors, the Company has made and will continue to make substantial investments in AI infrastructure and capabilities; a significant fraction of the Company’s ongoing capital expenditures are related to AI (for example, in servers, network equipment, and data centers). In its fiscal year 2023 Form 10-K filing Alphabet indicated that it expects “that [its] capital expenditures will increase, including the expected increase in [its] technical infrastructure investment to support the growth of [its] business and [its] long-term

¹⁰⁵ Andrien Report, ¶ 131.

¹⁰⁶ Andrien Report, ¶ 131.

¹⁰⁷ Alphabet 2023 10-K, p. 42.

initiatives, in particular in support of artificial intelligence (AI) products and services.”¹⁰⁸ Indeed, in the first half of 2024 Alphabet incurred over \$25 billion in capital expenditures, primarily for investments in technical infrastructure.¹⁰⁹ In its most recent (second quarter) Form 10-Q filing, the Company indicated that it expected investments in technical infrastructure to “increase relative to 2023...to support the growth of [its] business and [its] long-term initiatives, in particular in support of AI products and services.”¹¹⁰ In addition to capital expenditures, during the same period Alphabet incurred R&D expenditures of over \$23 billion, which also include AI-related investments.¹¹¹ Alphabet characterizes its investments in AI as “critical,” noting that “AI technology and services ... require significant investment, including development and operational costs, to meet the changing needs and expectations of [its] existing users and attract new users” and that its “financial condition and operating results may also suffer if [its] products and services are not responsive to the evolving needs and desires of [its] users, advertisers, publishers, customers, and content providers.”¹¹² Mr. Andrien fails to provide any analysis, including analysis based on any reliable, supported methodology, that would support a conclusion that having to pay his proposed \$29 billion penalty would not adversely affect the Company’s ability to sustain its planned investment program, including these AI investments. Indeed, he seems to be proposing that an amount equal to a public company’s *entire annual* capital expenditures is economically unimportant such that payment of this amount would not impact its “day-to-day operations.” This assertion seems implausible based on any reasonable point of reference.

70. It is also instructive to consider another benchmark, namely the magnitude of Mr. Andrien’s proposed penalty relative to the aggregate profits of DVAA. Mr. Andrien’s proposed \$29 billion penalty is [REDACTED], as reported in his Exhibit 2.¹¹³ As another point of reference, Mr. Andrien’s proposed penalty is approximately equal to the total annual revenue

¹⁰⁸ Alphabet 2023 10-K, p. 3. *See also* Alphabet 2023 10-K, p. 42 (“We expect to increase, relative to 2023, our investment in our technical infrastructure, including servers, network equipment, and data centers, to support the growth of our business and our long-term initiatives, in particular in support of AI products and services.”).

¹⁰⁹ Alphabet 2024 Q1 10-Q, p. 33; Alphabet 2024 Q2 10-Q, p. 37.

¹¹⁰ Alphabet 2024 Q2 10-Q, pp. 37, 45.

¹¹¹ Alphabet 2024 Q2 10-Q, pp. 32, 41.

¹¹² Alphabet 2023 10-K, p. 11. In the Company’s Q2 2024 earnings call, its CEO, Mr. Sundar Pichai, responded in the following way to an analyst’s question about the extent of the Company’s investments in AI: “...the risk of underinvesting is dramatically greater than the risk of overinvesting for us here. ...I think not investing to be at the front here, I think, definitely has much more significant downsides.” *See* Alphabet Q2 2024 Earnings Call, July 23, 2024, available at <https://abc-xyz/assets/bd/7b/d5783184953be8bcc2c5a42ace8/2024-q2-earnings-transcript.pdf>, accessed on July 30, 2024.

¹¹³ Andrien Report, Exhibit 2.

of Google Network, which as mentioned above, includes but is not limited to the DVAA products at issue; in 2023, this amount was around \$31 billion.¹¹⁴ As another benchmark, the proposed penalty represents [REDACTED]

[REDACTED]. Mr. Andrien fails to explain how one could reasonably conclude that a \$29 billion penalty would not affect Google’s “day-to-day operations” when it is [REDACTED]

71. Mr. Andrien speculates about how Google might be able to pay a \$29 billion penalty (without, as he claims, affecting day-to-day operations): he asserts that Alphabet “can pause, delay or reduce its share repurchases to pay the penalty assessed in this case and avoid any impact to its business greater than what it has already determined is acceptable.”¹¹⁵ It appears that Mr. Andrien is referring to Alphabet’s recent announcement that its board authorized “the company to repurchase up to an additional \$70.0 billion of its Class A and Class C shares.”¹¹⁶ At the same time as the repurchase announcement, Alphabet announced its first ever quarterly dividend (of approximately \$2.5 billion) and that it “intends to” pay dividends each quarter “subject to review and approval by the company’s Board of Directors in its sole discretion”, i.e., the company initiated a regular quarterly dividend.¹¹⁷ This is the first dividend in the Company’s history.¹¹⁸

72. Mr. Andrien, however, does nothing to assess the impact on the Company and its shareholders if Alphabet were forced, as a result of the penalty, to reverse or partly reverse these decisions and discontinue or decrease the share repurchase or the dividend program. If such a reversal were viewed negatively by the market it could negatively impact Alphabet’s share price and so compound the effect of the penalty on Google’s day-to-day operations, directly affecting the Company’s shareholders.

¹¹⁴ Alphabet 2023 10-K, p. 35.

¹¹⁵ Andrien Report, ¶ 139.

¹¹⁶ Alphabet Inc. Form 8-K, Exhibit 99.1, filed on April 25, 2024.

¹¹⁷ Andrien Report, ¶ 82. *See also* Alphabet Inc. Form 8-K, Exhibit 99.1, filed on April 25, 2024; Alphabet 2024 Q2 10-Q, p. 37 (“Dividend payments to stockholders of Class A, Class B, and Class C shares were \$1.2 billion, \$173 million, and \$1.1 billion, respectively, totaling \$2.5 billion for the three months ended June 30, 2024.”).

¹¹⁸ *See, e.g.*, Stephen Morris and Richard Waters, “Alphabet Surges Past \$2tn Valuation as Search Giant Announces First Dividend,” *Financial Times*, April 26, 2024, available at <https://www.ft.com/content/23b4b384-5971-4f91-a9c9-8a779d10b6bc?shareType=nongift>, accessed on July 24, 2024.

Executed this 30 July, 2024

A handwritten signature in black ink, appearing to read "Doug Skinner", with a long horizontal stroke extending to the right.

Douglas J. Skinner, Ph.D.

APPENDIX A

DOUGLAS J. SKINNER

Deputy Dean for Faculty
Sidney Davidson Distinguished Service Professor of Accounting
The University of Chicago Booth School of Business
5807 South Woodlawn Avenue
Chicago, IL 60637
Phone: 773-702-7137
dskinner@chicagobooth.edu
[Google Scholar](#)
[SSRN](#)

Education

B.Ec. (First Class Honours), Accounting/Finance, Macquarie University, 1985.
M.S., Applied Economics, University of Rochester, 1988.
Ph.D., Accounting (major area), Finance (minor area), University of Rochester, 1989.

Appointments

University of Chicago, Booth School of Business
Sidney Davidson Distinguished Service Professor of Accounting, 2023-
Deputy Dean for Faculty, 2015-2016, 2017-2024.
Interim Dean, 2016-2017.
Eric J. Gleacher Distinguished Service Professor of Accounting, 2014-2022.
John P. and Lillian A. Gould Professor of Accounting, 2006-2013.
Executive Director, Accounting Research Center, 2011-2016.
Professor of Accounting and Neubauer Family Faculty Fellow, 2005-2006.
Neubauer Faculty Fellow and Visiting Professor of Accounting, 2003-2004.

Independent Trustee and Audit Committee Chair, Harbor Funds, Harbor Funds II, and
Harbor ETF Trust, 2020-

Senior Fellow, Asian Bureau of Finance and Economic Research (ABFER), 2017-

University of Melbourne, Faculty of Business and Economics
Professorial Fellow, 2010-.

Journal of Accounting Research
Senior Editor, 2006-2021.

Journal of Accounting & Economics
Editor, 2000-2005.
Associate Editor, 1994-2000.

APPENDIX A

University of Michigan Business School (now Ross School of Business)
KPMG Professor of Accounting, 1998-2005
Accounting Area Chair, 2001-2003
Professor of Accounting, 1997-2005
Associate Professor of Accounting, 1993-1997
Assistant Professor of Accounting, 1989-1993

Coopers & Lybrand (Sydney)
Auditor, 1980-82.

Scholarly Honors and Awards

FARS 2020 Best Paper Prize for “Run EDGAR Run: SEC Dissemination in a High Frequency World.” With Jonathan L Rogers and Sarah L. C. Zechman.

Distinguished Ph.D. Mentoring Award, 2020, Financial Reporting Section, American Accounting Association.

BlackRock prize for best paper, 2015 Review of Accounting Studies conference (“The role of the media in disseminating insider trading news.” With Jonathan Rogers and Sarah Zechman.)

Hillel J Einhorn Excellence in Teaching Award, 2014.

Emory Williams Award for Teaching Excellence, 2013.

FARS 2009 Best Paper Prize for “Earnings Momentum and Earnings Management.” With James Myers and Linda Myers.

Jensen Prize for best paper in Corporate Finance and Organizations published in the *Journal of Financial Economics* in 2004. (“Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings.” With Harry DeAngelo and Linda DeAngelo.)

CQA/IBES Research Competition, 1998. (“Earnings Surprises, Growth Expectations, and Stock Returns or Don’t Let an Earnings Torpedo Sink Your Portfolio.” With Richard Sloan. Review of Accounting Studies, 7, 2/3, June/September 2002: 289-312.)

KPMG Peat Marwick Faculty Fellow 1993-1996.
KPMG Peat Marwick Research Fellow 1991-1993.
Deloitte Haskins & Sells Foundation Doctoral Fellow 1986-88.
University of Rochester Sproull Fellow 1985-1987.

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Main Publications

"Options Markets and Stock Return Volatility." Journal of Financial Economics 23, 1, June 1989: 61-78.

"Options Markets and the Information Content of Accounting Earnings Releases." Journal of Accounting & Economics 13, 3, October 1990: 191-211.

"Dividends and Losses." With Harry DeAngelo and Linda DeAngelo. Journal of Finance 47, 5, December 1992: 1837-1863.

"The Investment Opportunity Set and Accounting Procedure Choice: Preliminary Evidence." Journal of Accounting & Economics 16, 4, October 1993: 407-445.

"Accounting Choice in Troubled Companies." With Harry DeAngelo and Linda DeAngelo. Journal of Accounting & Economics 17, 1-2, January 1994: 113-143.

"How Do Taxes Affect Investors' Stock Market Realizations? Evidence from Tax-Return Panel Data." With H. Nejat Seyhun. Journal of Business 67, 2, April 1994: 231-262.

"Why Firms Voluntarily Disclose Bad News." Journal of Accounting Research 32, 1, Spring 1994: 38-60. (This article is abstracted in The CFA Digest 24, 4, Fall 1994.)

"Reversal of Fortune: Dividend Policy and the Disappearance of Sustained Earnings Growth." With Harry DeAngelo and Linda DeAngelo. Journal of Financial Economics 40, 3, March 1996: 341-371.

"Earnings Disclosures and Stockholder Lawsuits." Journal of Accounting & Economics 23, 3, November 1997: 249-282.

"Determinants of the Valuation Allowance for Deferred Tax Assets under SFAS-109." With Gregory S. Miller. The Accounting Review 73, 2, April 1998: 213-233.

"An Empirical Examination of Conference Calls as a Voluntary Disclosure Medium." With Richard Frankel and Marilyn Johnson. Journal of Accounting Research 37, 1, Spring 1999: 133-150.

"Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators." With Patricia Dechow. Paper delivered at the AAA/FASB Financial Reporting Issues Conference in December, 1999. Accounting Horizons, 14, 2, June 2000: 235-250.

"Special Dividends and the Evolution of Dividend Signaling." With Harry DeAngelo and Linda DeAngelo. Journal of Financial Economics, 57, 3, September 2000: 309-354.

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“Earnings Surprises, Growth Expectations, and Stock Returns or Don’t Let an Earnings Torpedo Sink Your Portfolio.” With Richard Sloan. Review of Accounting Studies, 7, 2/3, June/September 2002: 289-312.

- Winner, 1998 Chicago Quantitative Alliance/IBES Research Competition.

“Large Sample Tests of the Debt Covenant Hypothesis.” With Ilia Dichev. Journal of Accounting Research, 40, 4, September 2002: 1091-1123.

“The Role of Supplementary Statements with Management Earnings Forecasts.” With Amy P. Hutton and Gregory S. Miller. Journal of Accounting Research 41, 5, December 2003: 867-890.

“Employee Stock Options, EPS Dilution, and Stock Repurchases.” With Daniel Bens, Venky Nagar, and M. H. Franco Wong. Journal of Accounting and Economics, 36, 1-3, December 2003: 51-90.

“Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings.” With Harry DeAngelo and Linda DeAngelo. Journal of Financial Economics, 72, 3, June 2004: 425-456.

- Jensen Prize for best paper, Corporate Finance and Organizations.

“Earnings Momentum and Earnings Management.” With James Myers and Linda Myers. Journal of Accounting, Auditing and Finance, 22, 2, Spring 2007: 249-284.

- FARS Best paper prize, 2009.

“Does Earnings Guidance Affect Market Returns? The Nature and Information Content of Aggregate Earnings Guidance.” With Carol Anilowski and Mei Feng. Journal of Accounting and Economics 44, 1-2, September 2007: 36-63.

“The Evolving Relation between Earnings, Dividends, and Stock Repurchases.” Journal of Financial Economics 87, 3, March 2008: 582-609.

“Accounting for Intangibles – A Critical Review of Policy Recommendations.” Accounting and Business Research 38, 3, 2008: 191-204.

“A reply to Lev’s rejoinder to ‘Accounting for Intangibles – A Critical Review of Policy Recommendations.’” Accounting and Business Research 38, 3, 2008: 215-216.

“The Rise of Deferred Tax Assets in Japan: The Role of Deferred Tax Accounting in the Japanese Banking Crisis.” Journal of Accounting and Economics 46, 2-3, 2008: 218-239. Lead article.

“Corporate Payout Policy.” With Harry DeAngelo and Linda DeAngelo. Foundations and Trends in Finance 3, 2-3, 2008: 95-287.

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- “Management Forecasts in Japan: An Empirical Study of Forecasts that are Effectively Mandated” (Previously titled “When Voluntary Disclosure Isn’t Voluntary: Management Forecasts in Japan.”) With Kazuo Kato and Michio Kunimura. The Accounting Review 84, 5 (September 2009): 1575-1606.
- “Earnings Guidance and Market Uncertainty.” With Jonathan Rogers and Andrew Van Buskirk. Journal of Accounting and Economics 48, 1 (October 2009): 90-109.
- “Implications for GAAP from an analysis of positive research in accounting.” With S. P. Kothari and Karthik Ramanna. (Previously titled: “What Should GAAP Look Like? A Survey and Economic Analysis.”) Journal of Accounting and Economics 50, 2-3 (December 2010): 246-286. (Invited review paper.)
- “What Do Dividends Tell Us About Earnings Quality?” With Eugene Soltes. Review of Accounting Studies 16, 1 (March 2011): 1-28.
- “Measuring Securities Litigation Risk.” With Irene Kim. Journal of Accounting and Economics 53, 1-2 (February-April 2012): 290-310.
- “Audit Quality and Auditor Reputation: Evidence from Japan.” With Suraj Srinivasan. The Accounting Review 87, 5 (September 2012): 1737-1765.
- “The Politics of Accounting Standard-Setting: A Review of Empirical Research.” With Brandon Gipper and Brett J. Lombardi. Australian Journal of Management 38, 3 (December 2013): 523-551.
- “Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends.” With Eric Floyd and Nan Li. Journal of Financial Economics 118, 2 (November 2015): 299-316.
- “The role of the media in disseminating insider trading news.” With Jonathan L. Rogers and Sarah L. C. Zechman. Review of Accounting Studies 21, 3 (September 2016): 711-739.
- *BlackRock prize for best paper, Review of Accounting Studies conference, 2015.*
- “Is Japan Really a “Buy”? The Corporate Governance, Cash Holdings, and Economic Performance of Japanese Companies.” With Kazuo Kato and Meng Li. Journal of Business Finance & Accounting 44, 3 & 4 (March/April 2017): 480-523.
- “Run EDGAR Run: SEC Dissemination in a High Frequency World.” With Jonathan L Rogers and Sarah L. C. Zechman. Journal of Accounting Research 55, 2 (May 2017): 459-505.
- *FARS Best paper prize, 2020.*
- “Importing Activists: Determinants and Consequences of Increased Cross-border Shareholder Activism.” With Mark G. Maffett and Anya Nakhmurina. Journal of Accounting & Economics 74, 2-3 (November-December 2022).
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3721680

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Conference Proceedings

"Stock Returns, Trading Volume, and Bid-Ask Spreads Around Earnings Announcements: Evidence from the NASDAQ National Market System." Proceedings: Seminar on the Analysis of Security Prices, 36, 1, May 1991: 289-329. SSRN version https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2143649

Current Working Papers

"The Evolution of Audit Market Structure and the Emergence of the Big Four: Evidence from Australia." With Matthew Pinnuck and Colin Ferguson (deceased). Revised, May 2023. Under revision. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2431727

"Moving Forward: Management Guidance and Earnings Announcement Returns." With Yao Lu. April 2020, Revised September 2020. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3687764

"Corporate Managers' Perspectives on Forward-Looking Guidance: Survey Evidence." With Andrew C. Call, Paul Hribar, and David Volant. Revised, August 2023. Presented at *2023 JAE Conference*; under revision. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4214740

"Do Actions Speak Louder than Words? The Relation Between Payouts and Guidance Since 2000." With Yao Lu. August 2023. Under revision. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4322036

Invited Discussions and Commentaries (non-refereed)

"Are Disclosures About Bank Derivatives and Employee Stock Options 'Value Relevant'?" Journal of Accounting & Economics 22, 1-3, Aug.-Dec. 1996: 393-405.

"What Motivates Managers' Choice of Discretionary Accruals?" With Victor L. Bernard. Journal of Accounting & Economics 22, 1-3, Aug.-Dec. 1996: 313-325.

"Do Options Markets Improve Informational Efficiency?" Contemporary Accounting Research 14, 2, Summer 1997: 193-201.

"How Well Does Net Income Measure Firm Performance? A Discussion of Two Studies." Journal of Accounting & Economics, 26, 1-3, January 1999: 105-111.

"Should Firms Disclose Everything to Everybody? A Discussion of 'Open versus closed conference calls: The determinants and effects of broadening access to disclosure.'" Journal of Accounting and Economics 34, 1-3, January 2003: 181-187.

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‘Comments on “The Effects of Taxes on Market Responses to Dividend Announcements and Payments: What Can We Learn from the 2003 Dividend Tax Cut?”’ by Raj Chetty, Joseph Rosenberg, and Emmanuel Saez, in Alan J. Auerbach, James R. Hines, Jr., and Joel Slemrod, eds., Taxing Corporate Income in the 21st Century (Cambridge University Press, 2007): 36-40.

‘Discussion of “The implications of unverifiable fair-value accounting: Evidence from the political economy of goodwill accounting”’ Journal of Accounting and Economics 45, 2-3, August 2008, 282-288.

‘Discussion of “Accounting standards and debt covenants: Has the “Balance Sheet Approach” led to a decline in the use of balance sheet covenants?”’ Journal of Accounting and Economics 52, 2-3, November 2011: 203-208.

“Accounting research in the Japanese setting.” The Japanese Accounting Review, 1, 2011: 135-140.

“How should we think about earnings quality? A discussion of “Earnings quality: Evidence from the field.” With Mark W. Nelson. Journal of Accounting and Economics 56, 2-3 (December 2013): 34-41.

“The Evolving Disclosure Landscape: How Changes in Technology, the Media, and Capital Markets Are Affecting Disclosure.” With Gregory S. Miller. Journal of Accounting Research 53, 2 (May 2015): 221-239.

Other Publications

“Are the SEC's Safe Harbor Provisions Effective in Encouraging the Disclosure of Forward-Looking Information?” Financial Analysts Journal 51, 4, July-August 1995: 38-44.

“Issues in Foreign Exchange Hedge Accounting.” With Michael H. Moffett. Journal of Applied Corporate Finance 8, 5, Fall 1995: 82-94.

“Bad News Rings True.” With Amy P. Hutton and Gregory S. Miller. Investor Relations Quarterly 6, 2, 2004: 49-56.

“Japan’s Window Dressing Hid Olympus Fraud,” Bloomberg Opinion, November 30, 2011, <https://www.bloomberg.com/opinion/articles/2011-12-01/japan-s-window-dressing-hid-olympus-fraud-commentary-by-douglas-skinner>

“Why U.S. Companies Continue to Pay Dividends,” Bloomberg Opinion, April 11, 2012, <https://www.bloomberg.com/opinion/articles/2012-04-11/why-u-s-companies-continue-to-pay-dividends>

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“Corporate America is Enriching Shareholders at the Expense of the Economy.”
fivethirtyeight.com July 15, 2014. <http://fivethirtyeight.com/features/corporate-america-is-enriching-shareholders-at-the-expense-of-the-economy/>

The Financial Accounting Standards Committee of the AAA is charged with responding to requests by standards setters on issues related to financial reporting. As a member of that Committee from 1999 until 2002 I contributed to comment letters to the Financial Accounting Standards Board (FASB), the International Accounting Standards Committee (IASC), and the U.S. Securities and Exchange Commission (SEC). Published versions of these comment letters for which I served as principal author are as follows:

- Response to the FASB Preliminary Views: Reporting Financial Instruments and Certain Related Assets and Liabilities at Fair Value. (with J. M. Wahlen, Chair, J. R. Boatsman, R. H. Herz, G. J. Jonas, K. G. Palepu, S. G. Ryan, K. Schipper, and C. M. Schrand). *Accounting Horizons* December 2000, Vol. 14, No. 4, pp. 501-508.
- Implications of Accounting Research for the FASB’s Initiatives on Disclosure of Information about Intangible Assets. With L. A. Maines, Chair, E. Bartov, P. M. Fairfield, D. E. Hirst, T. E. Iannaconi, R. Mallett, C. M. Schrand, L. Vincent. *Accounting Horizons* June 2003, Vol. 17, No. 2, pp. 175-185.

Selected Media Coverage

“Dividends, Wall Street’s Battered Status Symbol,” *The New York Times*, February 13, 2016.

“As Stock Prices Slump, Don’t Count on Buybacks,” *Wall Street Journal*, January 25, 2016.

“Fast Traders Are Getting Data From SEC Seconds Early,” *Wall Street Journal*, October 29, 2014.

“High-frequency traders said to get SEC filings early,” *Financial Times*, October 29, 2014.

“Certain Traders May Get Early Looks at S.E.C. Filings, Paper Finds,” *The New York Times*, October 29, 2014.

“Flush with Cash, Apple Plans Buyback and Dividend,” *The New York Times*, March 19, 2012.

Professional Activities

Journal of Accounting Research: Senior Editor, 2006-2021.

Accounting and Finance, Editorial Board, 2012-2016.

Asia-Pacific Journal of Accounting & Economics, Associate Editor, 1999-2005.

Journal of Accounting & Economics:
Editor, 2000-2005.
Associate Editor, 1994-2000.

APPENDIX A

The Accounting Review, Editorial Advisory and Review Board, 1992-1996; 1997-1999.

Review of Accounting Studies, Co-Editor, 1999-2000.

Ad hoc referee for numerous accounting and finance journals.

Member: American Accounting Association, American Finance Association.

American Accounting Association Committees:

- Financial Accounting Standards Committee, 1999-2002.
- AAA/FASB Annual Financial Reporting Issues Conference Organizing Committee, 1999, 2000, 2005.
- 2001-2002 Competitive Manuscript Prize Committee.

Ph.D. Committees (chronological order with initial placements)

At Michigan:

Arun Kumar (Finance)
Christine Botosan. Washington University, St Louis.
Li Li Eng. Singapore National University.
Karen Nelson. Stanford.
Lillian Mills. Arizona.
Brian Bushee. Harvard Business School.
Marlene Plumlee (Chair). Utah.
David Heike (Finance). Western Ontario.
Timothy Burch (Finance). Miami (FL).
Gregory Miller (Chair). Harvard Business School.
Mark Bradshaw. Harvard.
Anchada Charoenrook (Finance). Vanderbilt.
Darren Roulstone (Co-chair). Chicago.
Linda Myers (Chair). Washington (Seattle).
Irem Tuna (Chair). Wharton.
Scott Richardson. Wharton.
Fai Cang (Finance). Vanderbilt.
Jef Doyle. Utah.
Irene Kim (Chair). Duke.
Mei Feng (Chair). Pittsburgh.
Wei Tang (Chair). Georgetown.

At Chicago:

Regina Wittenberg Moerman. Wharton.
Yu Gao. Minnesota.
Eugene Soltes (Chair). Harvard Business School.
Ningzhong Li. London Business School.

APPENDIX A

Lawrence Takeuchi (finance).
Pepa Kraft. NYU.
Jeff Ng. Chinese University of Hong Kong.
Anna Costello. (Chair). MIT.
Alon Kalay. Columbia.
Jonathan Milian. (Chair). Florida International University.
Meng Li (Co-chair). UT-Dallas.
Joao Granja. MIT.
Christine Cuny. NYU.
Joshua Madsen (Chair). Minnesota.
Marina Niessner (finance). Yale.
Eric Floyd. Rice.
Nan Li (Chair). Toronto.
Gerardo Perez Cavazos (Chair). Harvard Business School.
Frank Zhou (Chair). Wharton.
Matthew Bloomfield. Wharton.
Brett Lombardi (Chair). Monash (Australia).
Oleg Kuriukhin. Cornerstone Research.
Anya Nakhmurina. Yale SOM.
Johanna Shin. Capital Group.
Yao Lu. Cornell (Johnson).

Recent presentations, discussions, and talks.

2024: ABFER Singapore (discussant); FASB Financial Reporting Conference (discussant);
Tulane mini-accounting conference.

Last updated: 2 July 2024.

APPENDIX B

Douglas J. Skinner, Expert Reports and Testimony

Expert declaration; *Pershing Square Capital Management L.P., Valeant Pharmaceuticals, Inc. et al. v. Allergan, Inc. et al.*, in the Court of Chancery of the State of Delaware, C.A. No. 10057-CB. (2014).

Affidavit; *United States of America v. Todd S. Farha, Thaddeus M.S. Bereday, Paul L. Behrens, William L. Kale, and Peter E. Clay*, United States District Court, Middle District of Florida, Tampa Division, Case No. 8:11-cr-115-T-30MAP, 18 U.S.C. § 371, 18 U.S.C. § 1035, 18 U.S.C. § 1347, 18 U.S.C. § 1001, 18 U.S.C. § 982(a)(7) (2014).

Expert reports and cross examination testimony; *Jacqueline Coffin and Sandra Lowry v. Atlantic Power Corporation, Barry Welch and Terrence Ronan*, in the Ontario Superior Court of Justice, Court File No. CV-13-480939-00CP (2014 - 2015).

Expert reports and trial testimony; *Exelon Corporation v. Commissioner of Internal Revenue*, in the United States Tax Court, Docket Nos. 29183-13 and 29184-13 (2015).

Expert reports and deposition; *Baker Hughes Incorporated v. United States of America*, United States District Court, Southern District of Texas, Civil Action H-15-2675 (2017).

Expert report and deposition; *SEC v. RPM International et al.*, United States District Court for the District of Columbia, Civil Action No. 16-1803 (ABJ) (2018, 2019).

Expert report and deposition; *SEB Investment Management AB, Individually and on behalf of others similarly situated v. Endo International plc et al.*, United States District Court for the Eastern District of Pennsylvania, Civil Action No. 2: 17-CV-3711-TJS (2019).

Expert reports and trial testimony; *Tribune Media Company, f.k.a. Tribune Company & Affiliates v. Commissioner of Internal Revenue*, in the United States Tax Court, Docket Nos. 20940-16 and 20941-16 (2019).

Expert reports and depositions; *SEB Investment Management AB, Individually and on behalf of others similarly situated v. Symantec Corporation and Gregory S. Clark*, United States District Court Northern District of California, Case No.: 3:18-cv-02902-WHA (2020, 2021).

Expert report and deposition; *In re Allergan plc Securities Litigation*, United States District Court for the Southern District of New York, Civil Action No. 18-cv-12089 (2020, 2021).

Expert reports and depositions; *Alexandre Pelletier, Individually and on behalf of others similarly situated v. Endo International plc et al.*, United States District Court for the Eastern District of Pennsylvania, Civil Action No. 2: 17-cv-05114-MMB (2020, 2021).

Expert reports and depositions; *Purple Mountain Trust v. Wells Fargo & Company, et al.*, United States District Court Northern District of California, Civil Action No. 3:18-cv-03948-JD (2020, 2021).

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Expert reports and deposition; *Washtenaw County Employees Retirement System, Individually and on behalf of others similarly situated v. Walgreen Co. et al.*, United States District Court Northern District of Illinois Eastern Division, No. 1:15-cv-3187 (2020, 2021).

Expert report and deposition; *In re Novo Nordisk Securities Litigation*, United States District Court District of New Jersey, Master File No.: 3:17-cv-00209-BRM-LHG (2020, 2021).

Affidavit (expert report) and deposition; *Badesha Harpreet and Cronos Group Inc., et al.*, Ontario Superior Court of Justice, Court File No.: CV-20-00641990-00CP (2021).

Expert report and deposition; *Plumbers & Pipefitters National Pension Fund and Juan Francisco Nieves, as Trustee of the Gonzales Coronado Trust, Individually and on Behalf of All Others Similarly Situated v. Kevin Davis and Amir Rosenthal*, United States District Court Southern District of New York, Civil Action No. 1:16-CV-3591-GHW (2021).

Expert report, deposition, and trial testimony; *In Re CVR Refining, LP Unitholder Litigation*. In the Court of Chancery of the State of Delaware. Consolidated C.A. No. 2019-0062-KSJM (2021).

Expert reports, declaration, and depositions; *Christakis Vrakas, et al., v. United States Steel Corporation, et al.*, United States District Court Western District of Pennsylvania, Civil Action No. 17-579 (2021).

Expert report and deposition; *Gabby Klein et al., Individually and on behalf of others similarly situated v. Altria Group Inc., et al.*, United States District Court Eastern District of Virginia, Richmond Division, Civil Action No. 3:20-cv-00075-DJN (2021).

Expert report and deposition; *In Re Google Play Developer Antitrust Litigation*, United States District Court Northern District of California, Case No. 3:20-cv-05792-JD (2022).

Expert report; *In Re Maxar Technologies, Inc. Shareholder Litigation*, Superior Court of California, County of Santa Clara, Case No.: 19CV357070 (2022).

Expert report, deposition; *In Re Google Play Store Antitrust Litigation*, United States District Court Northern District of California, Case No. 3:21-md-02981-JD (2022, 2023).

Trial testimony; *Epic Games, Inc. vs. Google, LLC., et al.*, United States District Court Northern District of California, No. 3:20-cv-05671-JD (2023).

Expert report, deposition; *United States of America et al. vs. Google LLC*, United States District Court for the Eastern District of Virginia, Civil Action No. 1:23cv00108 (2024).

Expert declaration, deposition; *Richard J. Tornetta, individually and on behalf of all others similarly situated and derivatively on behalf of nominal defendant Tesla, Inc. v. Elon Musk, et al., and Tesla, Inc., Nominal Defendant*. In the Court of Chancery of the State of Delaware, Civil Action No. 2018-0408-KSJM (2024).

APPENDIX C

Documents Relied Upon List

Bates Stamped Documents

- GOOG-AT-MDL-001056062
- GOOG-AT-MDL-001950473
- GOOG-AT-MDL-002182530
- GOOG-AT-MDL-003206332
- GOOG-AT-MDL-004021793
- GOOG-AT-MDL-004039971
- GOOG-AT-MDL-004326981
- GOOG-AT-MDL-006876286
- GOOG-AT-MDL-008928775
- GOOG-AT-MDL-008928776
- GOOG-AT-MDL-008927854
- GOOG-AT-MDL-008928778
- GOOG-AT-MDL-008930610
- GOOG-AT-MDL-008930806
- GOOG-AT-MDL-009017821
- GOOG-AT-MDL-009017857
- GOOG-AT-MDL-009068311
- GOOG-AT-MDL-009643893
- GOOG-AT-MDL-009709671
- GOOG-AT-MDL-009709864
- GOOG-AT-MDL-009755689

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- GOOG-AT-MDL-015133684
- GOOG-AT-MDL-015133962
- GOOG-AT-MDL-019564516
- GOOG-AT-MDL-019564626
- GOOG-AT-MDL-C-000017359
- GOOG-AT-MDL-C-000018044
- GOOG-AT-MDL-C-000018256
- GOOG-DOJ-06206871
- GOOG-DOJ-11916795
- GOOG-DOJ-AT-02642407
- GOOG-DOJ-AT-02643272
- GOOG-DOJ-AT-02645423
- GOOG-DOJ-AT-02645446
- GOOG-DOJ-AT-02645470
- GOOG-DOJ-AT-02645766
- GOOG-DOJ-AT-02647833
- GOOG-DOJ-AT-02649870

Academic Articles and Books

- Joshua Rosenbaum and Joshua Pearl, *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions*, Second Edition (Hoboken, NJ: John Wiley & Sons, Inc., 2013)
- Srikant M. Datar and Madhav V. Rajan, *Horngren's Cost Accounting: A Managerial Emphasis*, Sixteenth Edition (Hoboken, NJ: Pearson, 2018)

Data

- *Refinitiv*

APPENDIX C

Depositions and Expert Reports

- Deposition of Jessica Mok, November 10, 2023
- Expert Report of Jeffrey S. Andrien, June 7, 2024, and Backup Materials

Legal Documents

- Defendant Google LLC's Responses and Objections to Plaintiffs' Second Set of Interrogatories, *The State of Texas, et al. v. Google LLC*, April 8, 2024
- Fourth Amended Complaint, *In Re: Google Digital Advertising Antitrust Litigation*, May 5, 2023
- Opinion and Order re Motion to Dismiss, *In Re: Google Digital Advertising Antitrust Litigation*, September 13, 2022

SEC Filings

- Airbnb, Inc. Form 10-K for the fiscal year ended December 31, 2023
- Alphabet Inc. Form 8-K, Exhibit 99.1, filed on April 25, 2024
- Alphabet Inc. and Google Inc. Form 10-K for the fiscal year ended December 31, 2015
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2016
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2017
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2018
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2019
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2020
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2021
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2022
- Alphabet Inc. Form 10-K for the fiscal year ended December 31, 2023
- Alphabet Inc. Form 10-Q for the quarterly period ended March 31, 2024
- Alphabet Inc. Form 10-Q for the quarterly period ended June 30, 2024
- Chevron Corporation Form 10-K for the fiscal year ended December 31, 2023

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APPENDIX D

Cost of Revenue and Gross Profit for Alphabet and DVAA

1. I have been asked by counsel to summarize measures of the cost of revenue and gross profit for Alphabet (and Google) and DVAA for fiscal years 2013 to 2023, to the extent such information is available. I report these amounts in **Tables D1** and **D2** below.

Table D1
Cost of Revenues for Alphabet/Google and DVAA, 2013–2023

<i>in millions</i>	2013	2014	2015	2016	2017		
Alphabet/Google ^[1]	\$21,993	\$25,691	\$28,164	\$35,138	\$45,583		
DVAA ^{[2][3]}							
<i>in millions</i>	2018	2019	2020	2021	2022	2023	Total
Alphabet/Google ^[1]	\$59,549	\$71,896	\$84,732	\$110,939	\$126,203	\$133,332	\$743,220
DVAA ^{[2][3]}							

Source: GOOG-AT-MDL-008927854; GOOG-AT-MDL-008928775; GOOG-AT-MDL-008928776; GOOG-AT-MDL-008928778; GOOG-DOJ-AT-02647833; GOOG-AT-MDL-009709864; GOOG-AT-MDL-C-000018044; Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note:

[1] Alphabet/Google Cost of Revenues is as reported on the Consolidated Statements of Income for Alphabet in its Form 10-K filings.

[2] DVAA Cost of Revenues is

[REDACTED]

[3] Alphabet/Google and DVAA Cost of Revenues are not necessarily comparable as these numbers are from two different sources. DVAA numbers are from Go/Ads P&Ls primarily used for internal purposes, whereas Alphabet numbers are from the Company's Form 10-K filings.

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Table D2
Gross Profit for Alphabet/Google and DVAA, 2013–2023

<i>in millions</i>	2013	2014	2015	2016	2017		
Alphabet/Google ^[1]	\$33,526	\$40,310	\$46,825	\$55,134	\$65,272		
DVAA ^{[2][3]}							
<i>in millions</i>	2018	2019	2020	2021	2022	2023	Total
Alphabet/Google ^[1]	\$77,270	\$89,961	\$97,795	\$146,698	\$156,633	\$174,062	\$983,486
DVAA ^{[2][3]}							

Source: GOOG-AT-MDL-008927854; GOOG-AT-MDL-008928775; GOOG-AT-MDL-008928776; GOOG-AT-MDL-008928778; GOOG-DOJ-AT-02647833; GOOG-AT-MDL-009709864; GOOG-AT-MDL-C-000018044; Alphabet and Google 2015 10-K; Alphabet 2016 10-K; Alphabet 2017 10-K; Alphabet 2018 10-K; Alphabet 2019 10-K; Alphabet 2020 10-K; Alphabet 2021 10-K; Alphabet 2022 10-K; Alphabet 2023 10-K

Note:

[1] Alphabet/Google Gross Profit is calculated as Revenues minus Cost of Revenues as reported on the Consolidated Statements of Income for Alphabet in its Form 10-K filings.

[2] [REDACTED]

[3] Alphabet/Google and DVAA Gross Profit are not necessarily comparable as these numbers are from two different sources. DVAA numbers are from Go/Ads P&Ls primarily used for internal purposes, whereas Alphabet numbers are from the Company's Form 10-K filings.

2. I present figures for cost of revenue and gross profit for DVAA based on internal company Go/Ads P&Ls. As discussed in Section VI, I understand that, prior to the implementation of the MECE-view, the DVAA product-level P&Ls were prepared using different forms of product-level P&Ls. As such, I deem this approach to be more appropriate given the extended time period that is being summarized. I also note that I am not aware of any Go/Ads P&Ls produced in this matter that include actuals for the fiscal year 2013, which is why these numbers are indicated as N/A in these tables.